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Cost-Earnings Study of the Atlantic-Based U.S. Pelagic Longline Fleet

Richard M. Porter, Maribeth Wendt,
Michael D. Travis, and Ivar Strand

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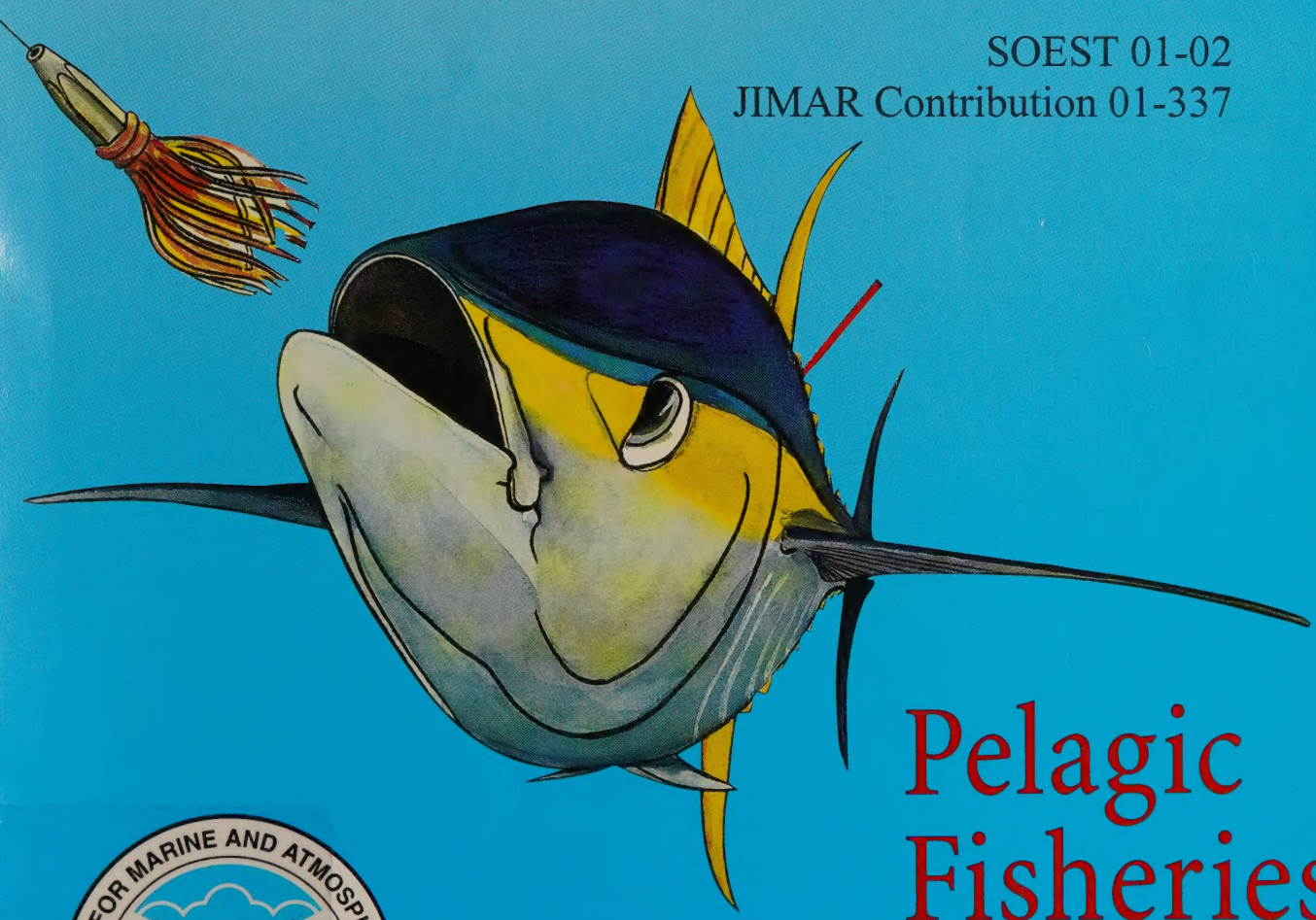

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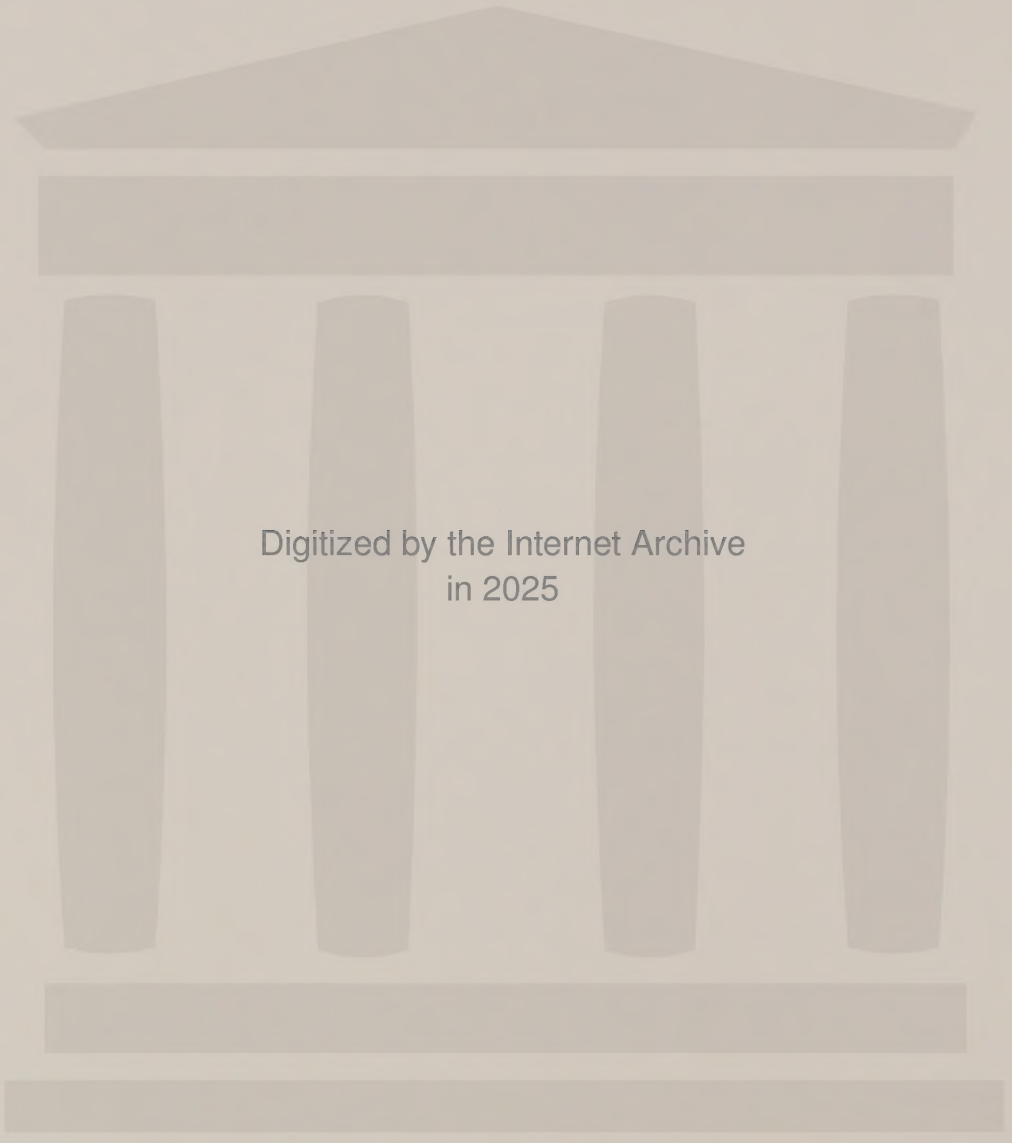
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Cost-Earnings Study of the Atlantic-Based U.S. Pelagic Longline Fleet

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PREFACE

The Western Atlantic Ocean, Gulf of Mexico and Caribbean Sea (WAGC) provide important fishing grounds for the pelagic longline (PLL) fishery. This fleet is an important element in the U.S. commercial fishing fleet and its activities are sometimes controversial. The target of the activity, swordfish and tuna, are highly migratory and are subject to international agreements as well as internal pressures from the U. S. recreational fishery. Vessels at times have to travel long distances to intercept the fish. The technology, romance, danger and vagaries of the activity have been captured in two recent books, The Perfect Storm and the Hungry Ocean. These books focus on the offshore, larger New England vessels.

In this text, a broader seascape of domestic pelagic longlining is portrayed using a sample of large and small vessels, of vessels operating in the Atlantic Ocean, Gulf of Mexico and Caribbean Sea, and vessels targeting swordfish, tuna or both. It is based on an intensive survey of over one hundred vessels on the Atlantic Coast and Gulf of Mexico It focuses on production and the economic activity of the fleet in 1997. Average activity of vessels, their costs and returns, are presented for vessels delineated on several criteria, including size, region and targeting behavior.

By the very nature of this process, our sample is vessels that are more successful that the average vessel in the fleet. Data for the last full year's operation of the vessel, 1997, is presented but is based on a survey begun in late 1998. The fleet size decreased significantly between those 1997 and 1998, going from 240 vessels during 1997 to approximately 200 during 1998. More stringent regulation, pressure from environmental interests increased (e.g. the boycott of swordfish by chefs), and rising costs were primarily the causal factors. The vessel owners who were less profitable in 1997 were not likely to be around for inclusion in the survey during 1998. Those who were faring better have a higher likelihood to be in our survey.

Comparing interviewed and non-interviewed vessel owners' revenues and trip activity suggests that our sample is a reasonable representative sample of the fleet at the time the surveying occurred. But it is not be representative of the fleet that existed in 1997. Comparison of landings from surveyed and non-surveyed vessels (p. 35) shows the differences. However, our sample may be representative of the fleet today.

The study would not have been possible without the foresight of Dr. John Sibert and Dr. Samuel Pooley who recognized the interdependence between pelagic longline vessels operating in different regions of the U.S. In an effort to understand the activity of the East Coast fleet, the Joint Institute of Marine and Atmospheric Research funded a study entitled "Interactions Among U.S. Longline Fisheries". This study has developed models of fleet economic activity on the East Coast comparable to models developed for the Hawaiian fleet. This report parallels those efforts by giving an annual cost and earnings picture, not just a set level or trip level analysis. It also obtains information from individuals regarding their movements across large distances. For example, a portion of the surveyed vessels had moved from Hawaii to the East Coast of the U.S. while a large portion follow fish movements from New England to the Gulf of Mexico.

INTRODUCTION

Baseline information on the pelagic longline fishery of the Western Atlantic Ocean, Gulf of Mexico and Caribbean (WAGC) may be useful to fisheries managers and participants in the fishery. To that end, this report is written. The focus year of the study is 1997. During that year, the fishery was open to any U.S. registered fishing vessel employing pelagic or surface longline gear and targeting Swordfish (*Xiphius gladius*), Yellowfin tuna (*Thunnus albacares*), Bigeye tuna (*T. obesus*), Albacore tuna (*T. alalunga*), minor tunas, coastal and pelagic sharks, and other highly migratory species. The number of vessels active in 1997 was 240.[1] Using existing data and surveying over 100 vessel owner/operators permitted compilation of economic cost and return information as well as substantial supplementary information.

METHODOLOGY

Data has been collected from a variety of sources: existing databases of the National Marine Fisheries Service (NMFS) and U.S. Coast Guard (USCG), and field surveys of vessel owners and hired captains. The NMFS data provides information on landings as well as price information permitting us to determine average trip and annual revenues for each vessel. The survey data included detailed information on fishing strategies, trip costs, fixed costs, share arrangements, vessel characteristics and demographics of the owner, crew and captain.

Survey Instrument

A sample of the primary survey instrument is attached as Appendix 1. A variation of the instrument was used depending on whether the respondent was an owner/operator, a hired captain, or an owner that did not operate their vessel. The survey instrument was based on one first employed in the Hawaii studies of 1994 and 1996 (see Hamilton, Curtis and Travis 1996), and adapted for vessels operating in the Western Atlantic, Gulf of Mexico and Caribbean. There are 55 questions, divided into five categories:

- Vessel characteristics
- Fishing and targeting strategies
- Demographics
- Comments about fishery regulation
- Economic information consisting of *variable costs*, which are incurred only if a trip is taken (fuel, oil, ice, bait, etc.) and *fixed costs*, which are not strictly related to the number of trips taken (insurance, accounting, etc.)

Survey Administration

Field surveys, conducted by two researchers from the Joint Institute for Marine and Atmospheric Research (JIMAR), began with a round of surveying lasting from October 1998 until October 1998 and focusing on 1997 vessel operations. Field surveying continued from October 1998 through to December 1998, and in March 1999. Apart from the field effort in

[1] An active vessel is defined to be a vessel that made at least one trip in 1997 where all sets were identifiably pelagic longline sets and the target on each set included swordfish or tuna.

March 1999, interviews conducted between January and October 1999 were conducted on the telephone. Each survey interview lasted between thirty and ninety minutes. Personal interviews, conducted in person or over the telephone, were chosen as most likely to yield a high response rate as well as more accurate data and have been used with 99% of respondents to date. Since vessels ported from Texas to Maine, personal interviews were conducted on a regional basis (see Table 1).

Table 1. Regional distribution of field survey effort

Date	States
October, 1998	Maine, Massachusetts, and Rhode Island
October, 1998	New York
December, 1998	New Jersey and Maryland
November, 1998	Virginia and North Carolina
December, 1998	South Carolina
March, 1999	Louisiana, Alabama and the Florida Panhandle

There are 110 complete vessel interviews. A total of 147 interviews have been conducted. Of these, 53% were conducted in person. Telephone interviews were conducted with those owners and captains that could not be interviewed in person (46% of respondents). This group is comprised chiefly of vessels operating out of Texas, Florida, Puerto Rico and the U.S. Virgin Islands.[2] Those vessels operating in the Western Atlantic in 1997 but now operating in the Southern Atlantic Ocean or Pacific were contacted by telephone or interviewed with the help of JIMAR staff at the University of Hawaii.

Adjustments were made to the survey process for participants who had difficulty with English. When necessary a translator was on hand to assist during the interview.

All respondents were sent a copy of the survey summary for verification of their responses, or to answer questions for which information remained missing or unavailable at the time of the interview. At this time participants were also asked if there was any additional information that they wanted to be added to their responses.

Tables 2a, 2b, and 2c summarize the fielding effort based on the operational structure of the fleet. The fleet was divided into categories based on vessel size and fishing strategy. Table 2a breaks down the survey effort by vessel size. Table 2c shows the fielding effort by target species/group. Table 2c is the intersection of 2a and 2b.

[2] Additional interviews (7) were conducted with the owners and captains of six vessels. These vessels were later determined to be targeting solely on shark in 1997, or were not active during the 1997 season, and thus are not part of the universe of active vessels for this study.

Table 2a. Number of vessels surveyed and number of active vessels by size

Size:	Total	Small	Medium	Large
Active Vessels:	240	106	85	49
Interviewed:	110	50	38	22
Survey, complete costs	102	44	38	20
Cost coverage (% Active vessels providing costs)	43%	42%	45%	41%

Vessel size is based on gross tonnage (as reported by the U.S. Coast Guard); a figure arrived at using vessel length, beam and depth. Mean gross tonnage was 74.4 tons, with a standard deviation of 44.0 tons. A medium vessel is considered to be any vessel between 50 and 96 tons, or approximately ½ standard deviation from the mean.z[3]

Table 2b. Number of vessels surveyed and number of active vessels by target type

Target:	Swordfish	Mixed	Tunas
Active Vessels:	68	120	52
Interviewed:	32	55	23
Survey, complete costs	30	52	20
Cost coverage (% Active vessels providing costs)	44%	43%	38%

Table 2c. Number of vessels surveyed and number of active vessels by size and target

Size:	Small			Medium			Large		
Target:	Sword	Mixed	Tuna	Sword	Mixed	Tuna	Sword	Mixed	Tuna
Active Vessels:	39	43	24	17	43	25	12	34	3
Interviewed:	16	23	11	11	17	10	5	15	2
Survey, complete costs	14	21	9	11	17	10	5	14	2
Cost coverage (% Active vessels providing costs)	36%	49%	38%	65%	40%	40%	42%	41%	67%

[3] Several of the active vessels are state-registered boats for which tonnage data is not reported. In such cases the vessel owners were contacted to obtain length, beam and depth figures, and gross tonnage determined using the following formula (Mahoney 1978, p. 42):

$$\text{gross tons} = \frac{2}{3} \cdot \left(\frac{LBD}{100} \right)$$

where L is vessel length in feet, B is vessel beam in feet, and D is vessel depth in feet.

A 40% coverage rate was determined to be the minimum needed to produce results within a 95% confidence interval.[4] Categories for which the criterion was not met were the vessels targeting tuna and the small tuna and swordfish categories. Readers are warned to consider conclusions regarding these categories with more caution than others.

Data Management

Survey responses from vessel owners and hired captains are combined into a summary file of vessel level information – this step is unnecessary for owner-operated vessels. Each summary file is then entered into a comprehensive "vessel" database. Only those vessels where both owner and hired captain have been surveyed, or the owner-operator has been surveyed are included. Range checks and data verification were conducted following the initial data entry. The survey period was October 1, 1998 through October 31, 1999. Follow-up interviews have been conducted throughout this period for verification purposes, and to meet sampling requirements.

In general, the information in the "vessel" database concerning vessel operations and trip costs is based on responses from vessel captains. Information on vessel investment and fixed costs is based on responses from vessel owners. Deviations from this approach are allowed in either of two circumstances. If information normally obtained from the captain or owner is missing, responses from the other party are substituted if available. The second circumstance in which substitutions are made is based on the judgment of survey interviewers concerning the level of involvement and knowledge of the respondents. For example, hired captains of vessels whose owners lived other than where the vessel ported often know more about all types of vessel costs and operations than did those vessels' owners. In other instances newly hired captains are not as knowledgeable about vessel operations as vessel owners are. In both of these cases, responses from the more informed participant are entered into the "vessel" survey database. When neither respondent answers a given question and missing information cannot be obtained through follow-up interviews, no other values will be substituted in their place within the vessel database. During analysis only complete surveys will be used.

Wherever possible, data on a vessel's age, gross tonnage, and length has been obtained through the U.S. Coast Guard Port State Information Exchange Database (CG-PSIX). Data for state registered boats were obtained from state title registries, permits, or the owner.

Set level data on gear configuration, fishing location, target choice, and catch has been obtained through the NMFS pelagic longline logbook database maintained at the Southeast Fisheries Science Center, Miami (SEFSC). This database is separated into a daily catch and

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[4] The minimum sample size needed for a confidence interval of 95% is based on the following:

$$n = \left(\frac{Z \cdot \sigma}{g} \right)^2$$

where n is the sample size, Z is the critical value (1.96 for 95% confidence interval), Φ is the standard error, and g is the sampling error. In this case, the standard error for total trip cost was taken from the Hawaii study (see Hamilton, Curtis and Travis 1996) and is $24,995. The sampling error for total trip cost, again based on the Hawaii study is +/- $5000.

effort database, a trip summary database, and economic information database. Average fish size is obtained from the domestic longline landings (or weigh-out) database. The HMS dealer database reports average monthly prices. The Northeast Fisheries Science Center maintains a database reporting trip level ex-vessel prices for vessels landing from North Carolina to Maine only. Additional ex-vessel price data has been obtained through the Florida Trip Ticket; such data is submitted to the Florida Fish and Wildlife Conservation Commission by dealers, and is maintained by the SEFSC.

Whenever possible, ex-vessel prices by species were matched to the trip. When this was not possible, the weighted-average price for the species, month and state of landing were used. When such a price was not available, the average annual price for the species by state of landing was used. If this price was not available, the average annual price for the species was used. Variations in average monthly ex-vessel prices for swordfish, bigeye tuna, yellowfin tuna, and mahi-mahi by region, vessel size, target, and size-target are illustrated in Figures 1-16. Revenues were calculated based on the deduced ex-vessel prices faced by each vessel for each trip in 1997. Summaries of the ex-vessel prices, landings and revenues can be found in Appendices II, III, and IV, respectively.

Data on trip lengths and fishing days were obtained using the trip summaries and set level logbooks in the federal databases. *Fishing days* are the number of sets reported in the PLL database, days between sets are counted as travel days. *Trip length* is the number days from departure date to landing date as reported in the trip summary database. Total *travel days* per trip is trip length less the number sets per trip. Initial examination revealed trips of excessive length. Upon closer inspection, date errors were noticed, and corrections made to several of these trips. Statistics regarding length of trip, travel days and fishing days are reported in Appendix V.

Input prices were obtained through the survey process. For surveyed vessels, input prices were matched to the vessel, and trip costs determined for each type of trip reported by the vessel owner or captain. Because the length of trips are so varied and captains reported trip costs for at most three representative trips, we computed average trip expenses per day at sea for each of the size-target combinations. The appropriate average expense-per-day or per-set was then combined with the actual days at sea for each vessel trip as reported in the logbook data. These were used to determine an average variable cost (trip expenses and selling costs) for each vessel.

Each vessel owner was also asked a question regarding the percentage earnings that pelagic longlining represented of the total earnings of the vessel. After the computation of return to owner from pelagic longlining, a value of additional earning was computed based on the percentage given in the vessel owner response. This is particularly important to include for vessels that operate in pelagic longlining for only a portion of the year.

For fixed costs, the reported actual fixed cost from responses given by the vessel owner and captain for each vessel was used. Depreciation was computed using the owner's estimated market value of the vessel and applying a depreciation rate of 8.5 % (based on a 12-year life expectancy for the vessel). This rate is often used for tax purposes and may overstate the actual depreciation of the vessel. As a result, net annual earnings are presented both with and without including depreciation. Depreciation is extremely difficult to measure and depends substantially on the maintenance performed by the captain and crew.

RESULTS

The process discussed above generated substantial information regarding the financial success of PLL fishing in the Western Atlantic and Gulf. The financial gains and losses of the fleet are now analyzed using the myriad of tables included in Appendix VI. The heterogeneity of fishing strategies, technologies and location require reporting results for numerous categorizations of the fleet. We first show the overall financial performance of vessels in our sample and then assess performance for various sub-samples. Specifically, we look at returns by regional fishing activity, vessel size, targeting behavior, the joint combination of vessel size and targeting behavior, and fulltime and part time participation in pelagic longlining.

Fleet Information

On average, the returns from participating in the pelagic longline fishery in1997 were not substantial (Appendix VI.1). Although the average vessel received nearly $250,000 in receipts, their variable expenses averaged $190,000 and the out of pocket fixed costs were nearly $50,000. This left approximately $8,000 to cover the depreciation on the vessel, estimated to be $17,000 per vessel. Even with income from other fishing activity, the average vessel owner lost approximately $3,500. If depreciation is thought of as a paper expense, then the vessel owners participating in PLL fishing netted about $13,750 from all of their fishing activity. This net gain was 6.8 % of the average estimated market value of the vessel of slightly over $200,000.

On a trip basis, the average vessel took a trip of about two weeks, with about seven days devoted to travel (Table VI.1a) and about one equal number of days fishing. Typically, about one set per day was accomplished. The average gross receipts per trip were $22,000 and the trip expenses, including labor, were about $16,000. This left a net operating return of approximately $6,000 on average. The largest cost share was labor, 43 %, followed by gear usage of 14%. The net trip returns (receipts- non-labor costs) were divided so that the boat received about 43% and the captain and crew about 57 %.

The heterogeneity in the PLL fleet makes generalizations based on averages of the entire fleet difficult at best. However, several comments should be made regarding the cost information contained in Tables IV.1 and IV.1a, if for no other reason than to give a baseline from which other sub categories can be compared. Of the total cost (not including depreciation), variable costs account for about 80 %. If depreciation is included, the variable cost share falls to about 73 %. Non-labor variable expenses account for nearly 60 % of the variable costs and slightly less than 50% of the total costs. Labor represents slightly less than half of the variable costs and about one-third of all costs. Fuel and gear costs represent the largest non-labor trip expenses, together representing about one-half of them. Labor costs are approximately $7,500 per trip and about $75,000 annually.

To give these numbers some context, a similar survey of PLL vessels was conducted in Hawaii for the year 1993. As a general statement, the average vessel in the Hawaiian fleet had nearly twice the absolute value of receipts and costs. That is, the annual receipts in 1993 were about $500,000 and the variable and fixed costs about $380,000 and $100,000 respectively. Interestingly, the relative shares of variable and fixed cost were approximately the same, 80% and 20% respectively. The wage share of total cost in Hawaii was 28 % whereas it is 32 % in

the WAGC sample. Food and gear cost shares are also larger in the current sample. Fuel was a greater share of total costs in Hawaii.

By Region

If vessels' costs and earnings are clustered on the basis of the region where the vessel principally operated[5] in 1997 (Tables VI.2-VI.6a), several patterns emerge. The longest trips, the fewest number of trips, and the highest valued vessel land in the geographic extremes of the sample's latitude. Vessels landing fish principally in New England required the longest trips (36 days/trip). These trips spent nearly three weeks of the time at sea traveling and about two weeks fishing on a trip. On average, only about 7 trips were taken in 1997. Their net operating return is about $20,000 per trip and fuel represents 15% of their trip expenses. For vessels that primarily landed fish in the Caribbean, the average trip lasted about 28 days at sea, with 11 of the days spent fishing. There were 9 trips taken on average during 1997. The net operating return is almost $20,000/trip and the average fuel cost was about 12 % of the trip costs. Labor's share of total costs is remarkably similar across the regions, representing slightly less than one-third of total cost. The exception to this is in the Caribbean region where the share rises to 37% of total costs. The total days fished for both areas were 100 days, with 150 travel days. The average market value of a vessel was the greatest in the Caribbean (about $350,000) but the New England vessels were the next most valued (about $250,000). Earnings from other fishing activity averaged between $6,000 and $9,000 in the two regions.

The Mid-Atlantic fleet's trips averaged slightly less than two weeks at sea, with 5 traveling and 7 fishing days. Over the year, vessels only averaged about 120 days longlining for pelagic species. Their earning from other fishing activities was the greatest of all regions (~$10,000/vessel). The average net operating return was about $5,000/trip. Fuel and gear expenses each averaged 14 % of trip expenses. The market value of the vessels was the least in the Mid-Atlantic, averaging slightly under $60,000 per vessel.

Trips of vessels operating in the Gulf of Mexico also averaged about two weeks at sea, with more travel time and one day fewer fishing than the Mid-Atlantic boats. Because they take more pelagic longline trips, the annual days longlining per vessel during 1997 in the Gulf is over 80 days, one-third greater than in the Mid-Atlantic. Although the fuel share is the same as the Gulf, the share of gear cost is less, presumably due to the fewer swordfish (with lightsticks) directed trips in the Gulf. The returns from other fishing activity were reported to be only $3,000. If depreciation is considered a paper cost and the earnings from other fishing activity added to the earnings from pelagic longlining, the vessel earned about $20,000 or about 18% of the market value of the vessel. This was the largest rate of return in any region.

Vessels operating in the South Atlantic took the shortest trips on average (7 days) and only longlined for pelagic species about 60 days during 1997. Vessels in the South Atlantic and Mid-Atlantic were the only one that spent more time fishing than traveling during a trip. The fuel only represented 8% of the total trip costs but gear represented 16%. The overall return on the value of the vessel was 13%, the same as the Caribbean's vessels and second only to vessel's in the Gulf of Mexico.

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[5] Regions are based on the area where most of the vessels' trips landed.

Based on absolute earnings, the vessels in the New England region and the Mid-Atlantic performed the worst in 1997. This could be due to their greater reliance on swordfish and the stricter quotas on swordfish during the year. It could also be the result of poorer than normal earnings from other fishing activities.

By Vessel Size

The costs and earnings also can be considered on the basis of size of vessel. Using the categories defined previously, Tables VI.7-VI.9a show the effect of size on the costs and earnings of pelagic longlining. The small vessel's length of trip was one week, the medium-sized vessel's two weeks and the larger vessels between two and three weeks. Only the smaller vessels averaged more fishing time at sea than traveling time. Regarding trip costs, the larger vessel's trip costs were about twice the medium-sized vessel's and between five and six times the smaller vessel's. The trip cost share of fuel and gear reflect the differences in operation. Fuel's cost share rises from 7% for a small vessel to 9% for a medium vessel to 17% for a large vessel. The reverse is true for gear's share of trip costs, falling from 17% for the small to 14% for medium boats to 12 % for the large boats. The other shares are nearly the same, except that labor costs are slightly higher for the medium sized boats.

For the larger vessels, the additional time at sea produced a proportionately greater net operating returns- a day at sea for a smaller vessel netted about $300 whereas the medium and larger vessels a day earned about $450. The net operating return for the larger vessel was about $11,000, for medium vessels about $6,500 and for the smaller boats about $2,000. However, these numbers do not consider fixed costs and earnings from alternative fishing operations.

When these are included, the picture is different. If fixed cost and earnings from other fishing activities are included, then the small vessels earn about 7% ($8535/$119615) of the market value of the vessel. The medium-sized vessels earn about 9% and the large vessels earn about 3%. The major difference is in the size of the fixed costs. Although fixed costs' share of total costs is about the same across different vessel size, the magnitude of the large vessels' fixed costs and the less than proportionate earnings from other fishing activity reduces the percentage return on the boat value.

By Fishing Target

Tables VI.10-VI.12a show the costs and earning of vessels based on the species that are targeted. By our definition, vessels target swordfish, tuna or a mix of the pelagic species. It is clear in the tables that the vessels targeting tuna perform financially better during 1997.

As a rule, boats targeting swordfish spent more time at sea per trip (almost three weeks) than boats targeting tuna (slightly over a week) or boats with a mixed species target (two weeks). Moreover, the number of trips taken by the swordfish boats were nearly twice the number taken by tuna boats and one-third greater than the mixed species boats. The result was that annual gross receipts were about $300,000 for the swordfish, $250,000 for the mixed species and $150,000 for the tuna boats.

Because lightsticks are considered essential for swordfish in addition to gear normally used to catch tuna, one expects the costs of total gear usage (gear + lightsticks) for the swordfish boats to be greater and they were. The share of trip costs that gear represented were

approximately the same (~14 %) across the various targeting strategies but the lightstick costs of swordfish boats were about $14,000, for mixed boats about $7,000 and for tuna boats about $2,500. The major difference in the shares of trip costs was:

1.) lightstick's share of trip costs of the swordfish vessel were four times greater than the tuna boats;

2.) selling expenses' share of trip costs for the tuna vessels were about four times less than the other two vessel types (2% versus 8%);

3.) labor's share of trip costs was higher for the tuna boats, about 50% versus about 40% for swordfish and mixed species boats.

The other major difference in the vessel categories was the earnings from other fishing activity. Tuna boats were able to earn nearly twice as much ($7,000) from other fishing.

When all of these factors are considered and depreciation is not considered, then the return on the vessel's value is nearly 20% for the tuna vessels, 4% for the vessels targeting a mix of species, and 5% for vessels targeting swordfish. Including an 8.5 % depreciation cost would cause the swordfish and species mix vessels to lose money and reduce the tuna boats' return to 9%.

By Vessel Size and Fishing Target

When the sample is considered on the basis of vessel size and fishing target jointly, then there are nine categories that are delineated. One category, large vessels targeting tuna, has too few vessels to report without violating confidentiality and is left out. It is not productive to go through each of these categories separately. Instead, a summary of the relevant information that we noted is provided. The reader is encouraged to carefully go through each of the tables (Tables VI.13-VI.20a) and maybe find points of interest that we missed.

As a rule, the time at sea does not vary with size across the small category but varies substantially across the medium and large vessel classes. For example, the length of a trip for a medium vessel targeting swordfish is 17 days whereas it is only 11 days for medium vessels targeting a mix of species. For all size groups, the ratio of fishing time to time spent at sea was largest for the vessels targeting a mix of species. The likely reason for this was the large percentage of vessels targeting the species mix that operated in the Mid-Atlantic and South Atlantic. These vessels do not travel great distances because they fish the western side of the Gulfstream and it is relatively close to shore.

Whereas labor's share of costs was constant across geographic regions, it did vary systematically within systematically within the size/target categories. The vessels targeting swordfish had the smallest share in the small and medium sized categories and the vessel's targeting tuna had the largest labor share in both categories. Because the vessel's targeting swordfish performed the worst in terms of returns to market value of the vessel, this suggests that they would have performed even worse had not the crew incurred losses in the form of lower wages.

Fixed cost's share of total cost remains fairly consistent across all target/size classification. Without much error, one could say that variable costs represent about 80% of all costs (excluding depreciation) and fixed costs (excluding depreciation) represent the remaining 20%.

This is not too dissimilar to the Hawaiian fleet where the variable costs represent 78% of total costs (excluding depreciation).

The return (return to owner + earnings from other fishing activity) to the market value of the vessel tended to be the lowest for the vessels targeting a species mix and this was consistent across vessel sizes. Because these vessels are landing in the Mid-Atlantic and South Atlantic, this may explain the low rates of return in those areas. The only size/target groups that had negative net operating returns on trips were the small and large vessels targeting a mix of species.

By Full and Part Time Participation in Pelagic Longlining

The definition of full time participation used by the USDA with regard to farming is a person is considered a full time farmer if over 50% of their income comes from farming. If we classify our surveyed vessels on the same basis with regard to earnings from pelagic longlining, distinctions between the full time participant and parttime participant can be drawn. Because there are unusual circumstances in 1997 for some interviewed boats, we also require that the full time vessels reported more than two pelagic longline trips during 1997. Using this definition, we obtained 15 vessels classified as part time and 87 vessels considered full time.

As expected, the average number of trips and the average length of trips for the full time boats were greater by nearly ten trips per year and nine days per trip. The gross receipts averaged nearly four times as much for the full time vessels and the net operating returns were about four times more. Earnings from other fishing activity was about $10,000 more for the part time pelagic longlinging vessels, reflecting their greater participation in other fisheries. Fixed costs were a much greater percentage of the total costs for the part time vessel operations, representing over one-third of total costs. This contrasts with the 20 % fixed cost share of total cost for the full time vessels. Overall, it was more beneficial to be committed to pelagic longlining than to "dabble" at it.

Caution must be exercised in using results from this section because the part time classification was based in part on the "exceptional circumstance" boat. That is, there were some vessels for one reason or another that took very few trips and they were considered to be part time vessels. The nature of the definition likely causes earnings to be less and fixed costs to represent a large share of total cost.

DISCUSSION AND SUMMARY

As mentioned in the Preface, the study year, 1977, was difficult for pelagic longlining vessels and approximately 16 % of them left the fishery. Their departure was due in part to the regulatory actions imposed on harvests of swordfish vessels operating in the North Atlantic fishery. Two actions are relevant. First, the quota during the beginning of 1997 was smaller than previous ones. The directed swordfish activity was prohibited as of April 13th and the allowable by-catch was set at 5 swordfish. As of June 1, the swordfish fishery was opened and a higher quota (1,064 metric tons) was established. On October 13th, the directed swordfish fishery was closed and a 15 swordfish bycatch limitation set.

This and other factors contributed to a financially poor year, on average, for pelagic longlining owners in the WAGC fishery. Overall, the gross annual receipts plus earnings from

other fishing operations were approximately $10,000 less than total costs, including depreciation. If depreciation were excluded, then the average earnings per vessel were approximately $15,000 or 6.7%.

That the poor performance can be attributed to the swordfish situation is revealed when earnings are considered on the basis of the targeting strategy of the vessels. The vessels that targeted tuna (mostly in the Gulf of Mexico) returned about 20% of the value of the vessel. Vessels targeting swordfish or a swordfish/tuna combination returned on average about 4%. Whether the depressed state of stocks or difficulties imposed by the regulations were responsible is difficult to assess but clearly there was a species effect on earnings.

It was generally true that vessels operating in the Gulf of Mexico and the Caribbean Sea fared better than vessels in the more northern climates. For vessels operating in the Gulf, it was a combination of lower costs and greater earnings from other fishing activities. Vessels in the Caribbean tended to have relatively high net operating returns per day at sea.

The technology of the WAGC pelagic longlining fleet, as expressed in costs and earnings is similar to the technology of the Hawaiian fleet, only on a smaller scale. In fact, the annual revenues, variable costs, and fixed costs of the Hawaiian fleet in 1993 were about double those of the WAGC fleet. The major difference was that fuel's share of total cost is greater in Hawaii, reflecting the greater distances traveled to get to the resource.

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FIGURES

Figure 1: Average Monthly Swordfish Prices by Region, 1997

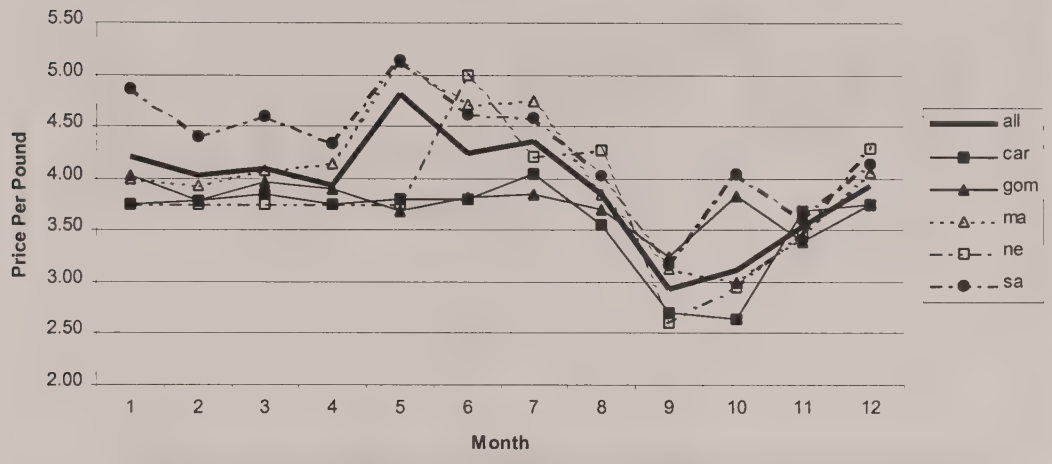


Figure 2: Average Monthly Swordfish Prices, by Vessel Size, 1997

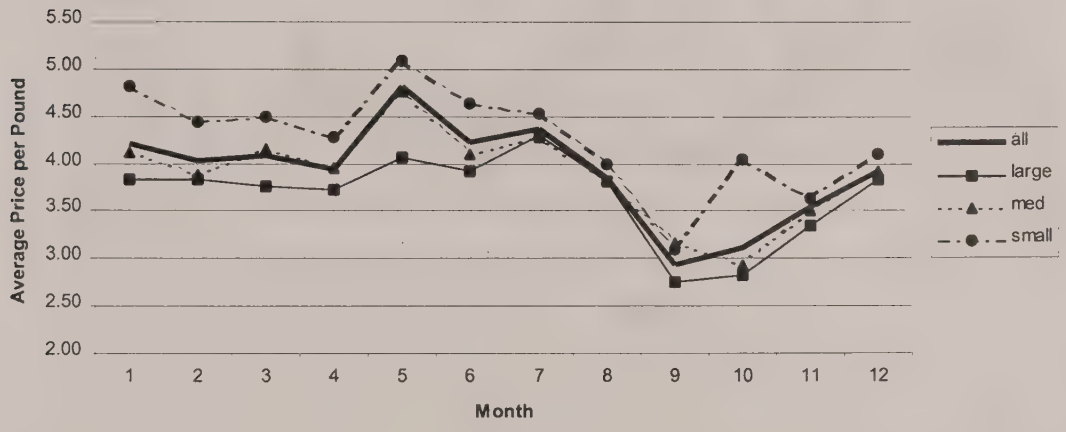


Figure 3: Average Monthly Swordfish Prices by Target, 1997

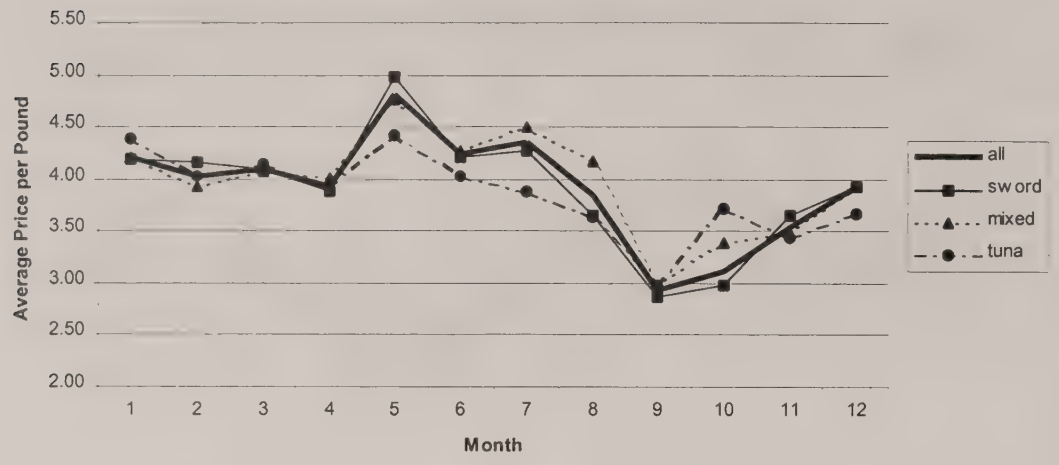


Figure 4: Average Monthly Swordfish Prices by Size-Target, 1997

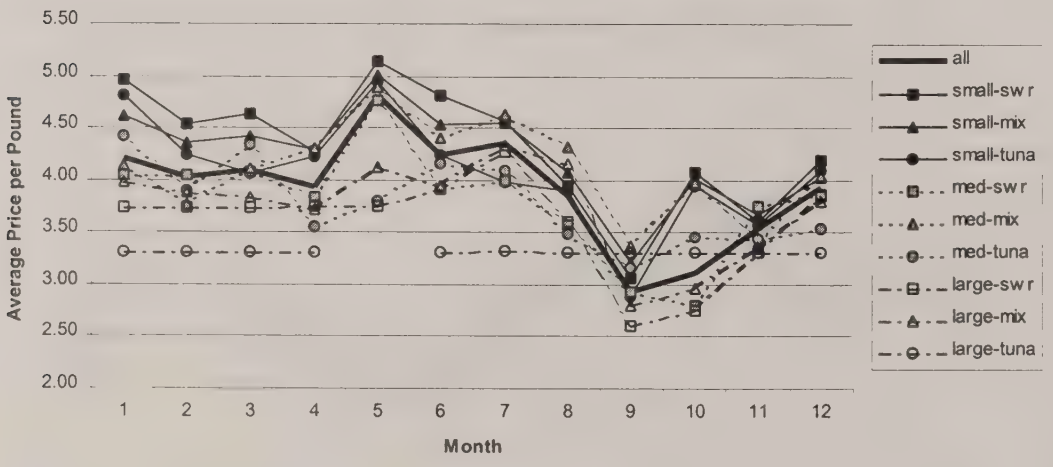


Figure 5: Average Monthly Bigeye Tuna Prices, by Region, 1997

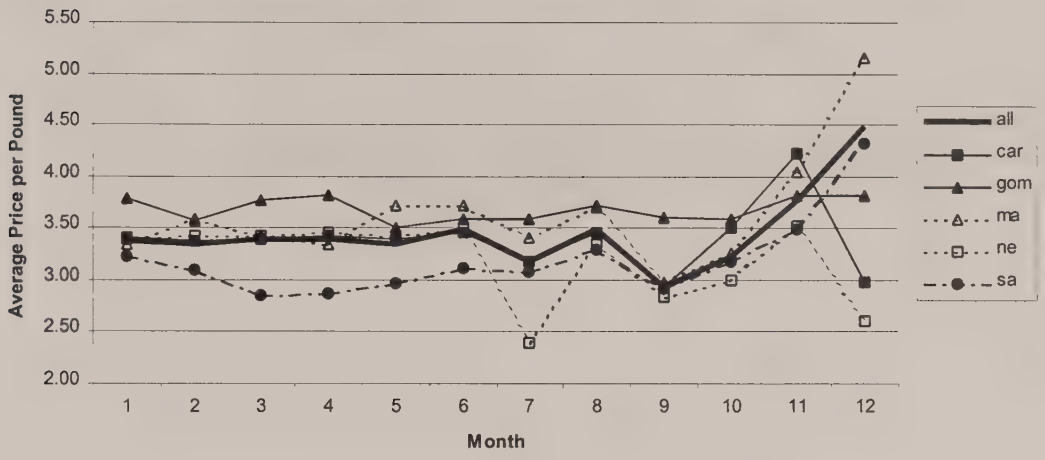


Figure 6: Average Monthly Bigeye Tuna Prices, by Vessel Size, 1997

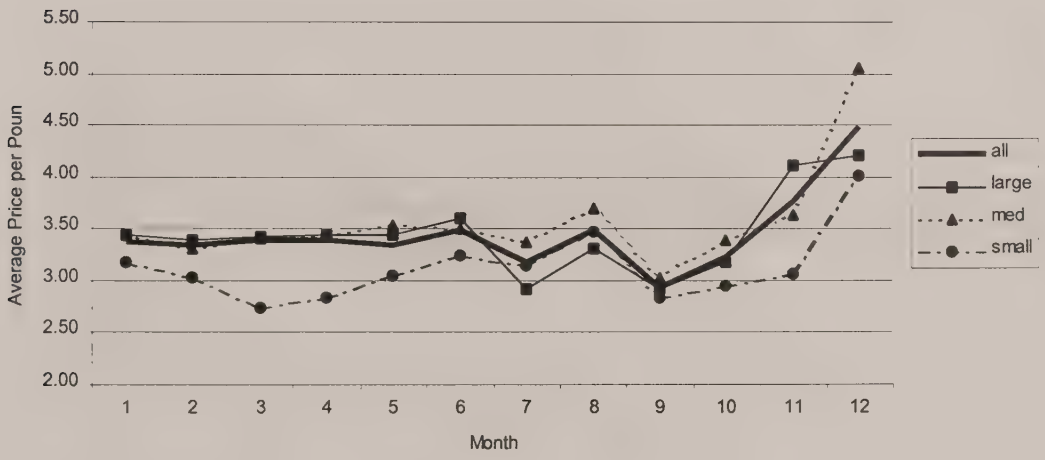


Figure 7: Average Monthly Bigeye Tuna Prices, by Target, 1997

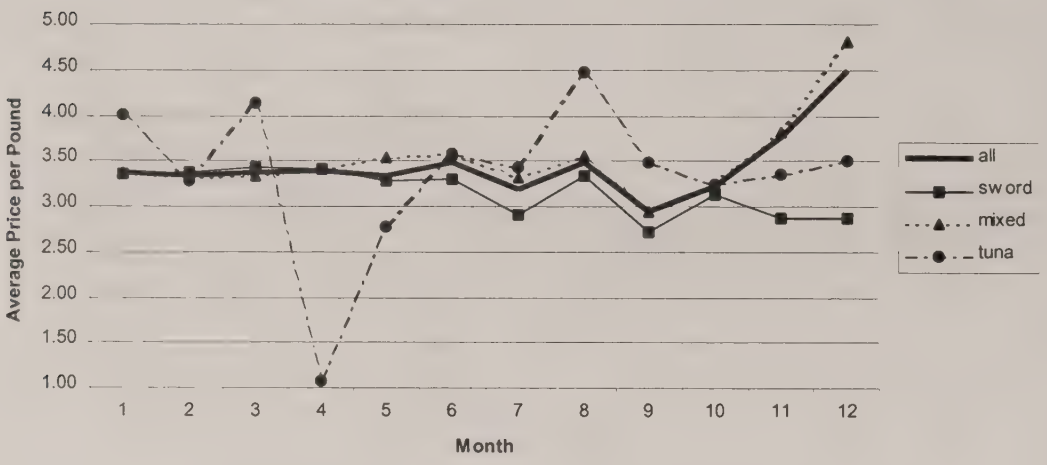


Figure 8: Average Monthly Bigeye Tuna Prices, By Size-Target, 1997

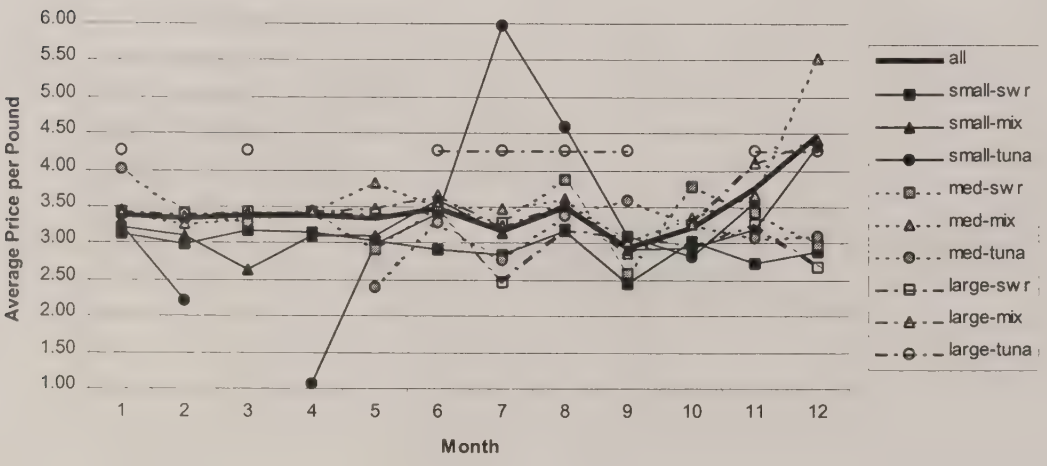


Figure 9: Average Monthly Yellowfin Tuna Price, by Region, 1997

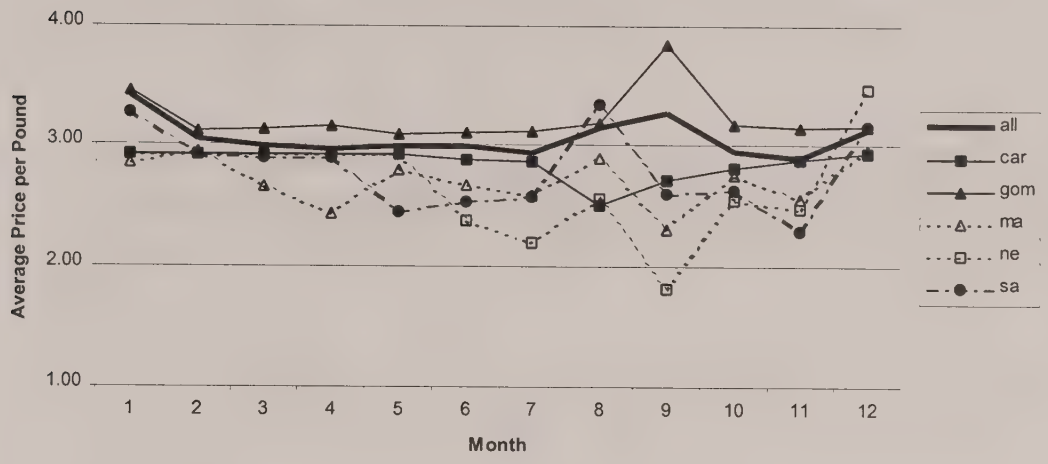


Figure 10: Average Monthly Yellowfin Tuna Prices, by Vessel Size, 1997

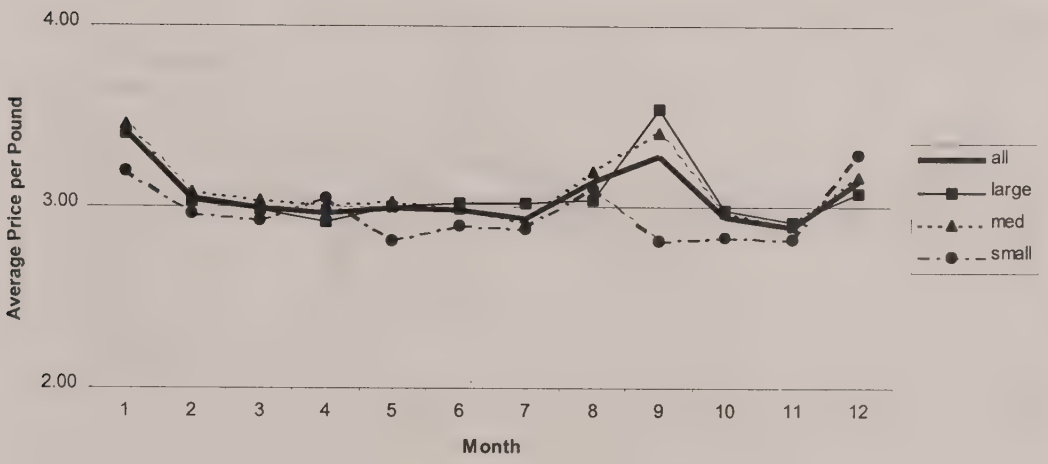


Figure 11: Average Monthly Yellowfin Tuna Prices, by Target, 1997

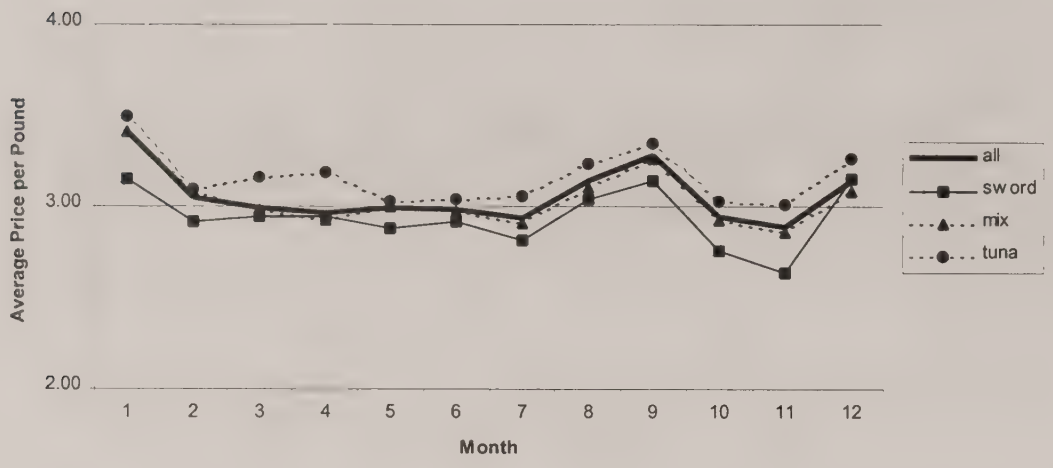


Figure 12: Average Monthly Yellowfin Tuna Prices, by Size-Target, 1997

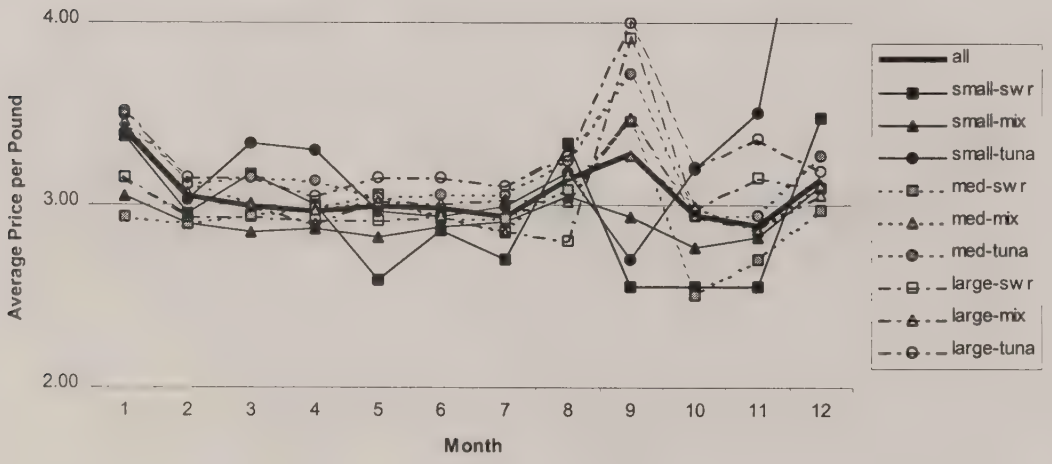


Figure 13: Average Monthly Mahi-Mahi Prices, by Region, 1997

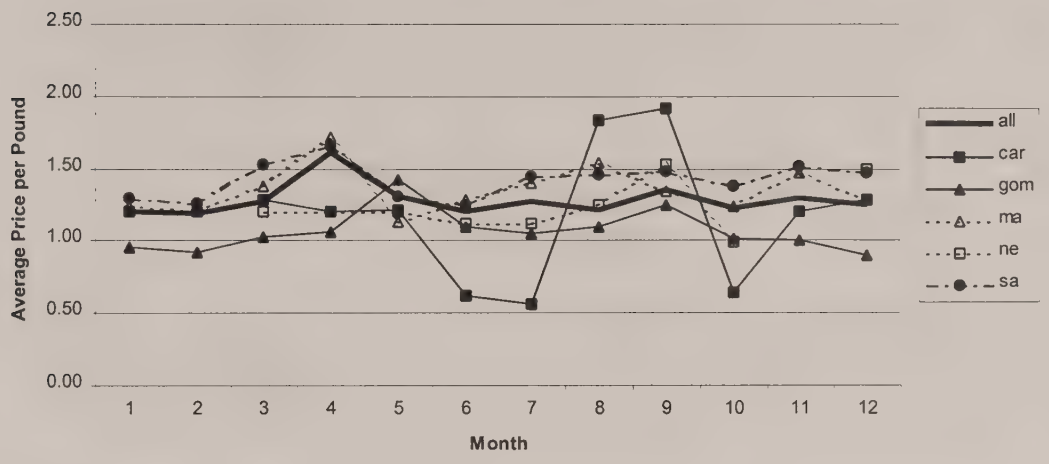


Figure 14: Average Monthly Mahi-Mahi Prices, by Vessel Size, 1997

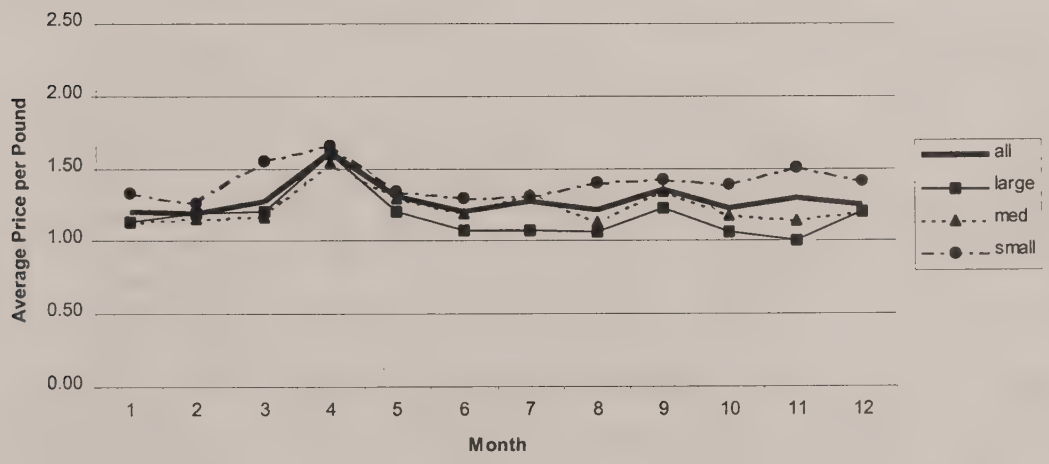


Figure 15: Average Monthly Mahi-Mahi Prices, by Target, 1997

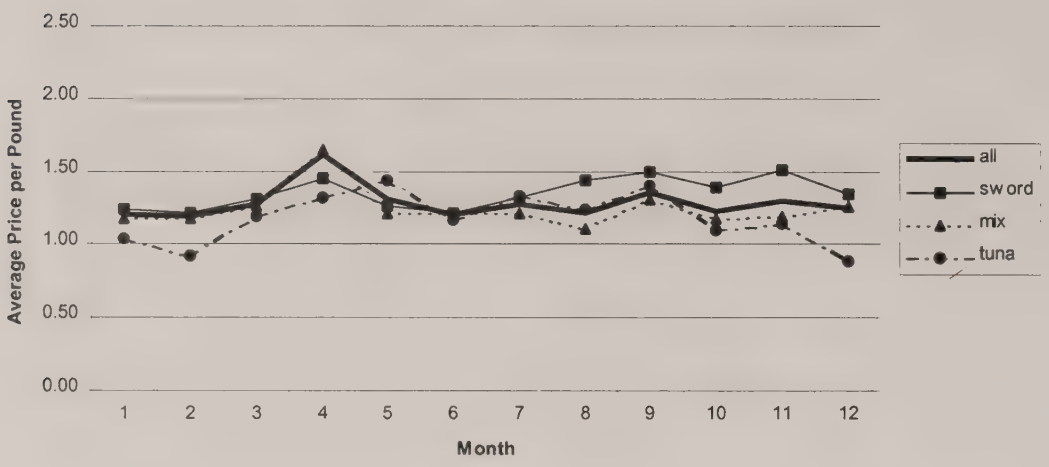
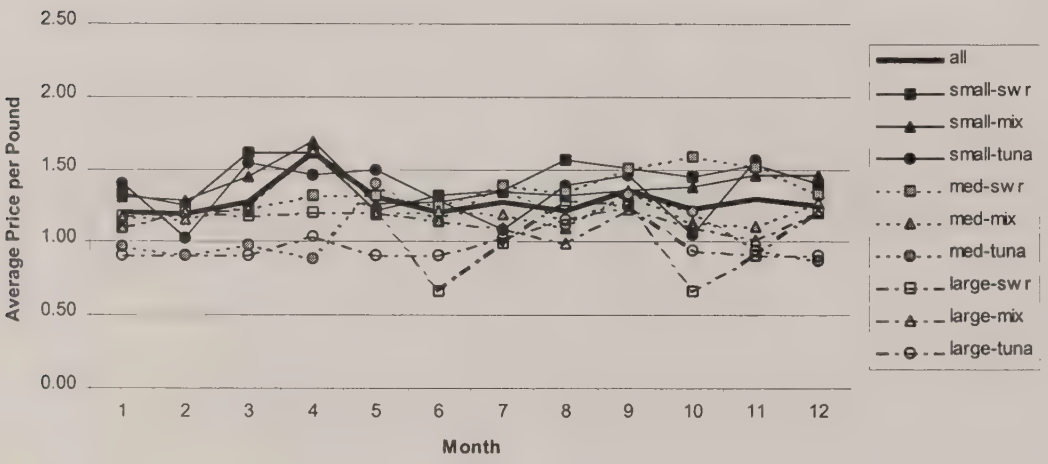


Figure 16: Average Monthly Mahi-Mahi Prices, by Size-Target, 1997



APPENDIX I: LONGLINE SURVEY 1998 (OWNER OPERATOR)

Vessel Name and ID Number	
Owner Operator/Hired Captain	
Interviewer(s)	
Date	

THIS SURVEY IS ABOUT YOUR VESSEL OPERATIONS IN 1997

Vessel Information:

1. Ownership.

	Sole owner		Corporation (no outside stockholders)
	Partnership (with family)		Corporation (with outside stockholders)
	Partnership (outside family)		"S" Corporation
	Leased from another owner		Other:

2. Who handles the vessel's finances?

	Owner		Captain		Other:

3. Year vessel was bought: _____

4. Purchase price for vessel: _____

5. If you've made improvements/additions since purchase, how much did you spend on:

$	gear (spool/line)	$	improvements to hull/hold/cabin
$	engine	$	icemaker
$	electronics	$	lineshooter
$	Other:		

6a. In 1997, what electronics did you use (note number if more than one):

	Depth sounder		SSB radio		VHF Radio
	INMARSAT		Temperature sensor		LORAN
	Direction finder/Radio buoy		CB Radio		Satellite navigation
	Autopilot		Cellular phone		Video plotter
	Radar		Weather fax		GPS
	Doppler radar		Telex:		Computer
	Other:		Other:		Other:

6b. Of these, which are the most important to success in the type of fishing you do? (Rank if more than one)

	Depth sounder		SSB radio		VHF Radio
	INMARSAT		Temperature sensor		LORAN
	Direction finder/Radio buoy		CB Radio		Satellite navigation
	Autopilot		Cellular phone		Video plotter
	Radar		Weather fax		GPS
	Doppler radar		Telex:		Computer
	Other:		Other:		Other:

7a. Do you have an icemaker? *YES / NO*
7b. If yes, when purchased? _____

8a. Do you have a lineshooter? *YES / NO*
8b. If yes, when purchased? _____
8c. If yes, how often did you use it in 1997? *Always / Sometimes / Never*

9. Hold capacity - how many pounds of fish with ice can your vessel hold?

lbs.	Tuna	lbs.	Swordfish	lbs.	Mixed

10. Maximum amount of longline carried? _____ Miles.

11. Number of engines (main & auxiliary if in HP, specify)? _____ Engines.

12. Horsepower per engine? _____ First engine. _____ Second engine.

13. Fuel capacity? _____ Gallons.

14. Fuel use/speed? Traveling _____ gallons per *hour / day*, at _____ knots.
Fishing _____ gallons per *hour / day*, at _____ knots.

Fishing Strategy Questions:

15. (For hired captain boats only) Who makes the decisions regarding:
a.) What to target? *owner / captain* b.) When to fish? *owner / captain*
c.) Where to fish? *owner / captain* d.) How long to fish? *owner / captain*

Note: Target = what fishermen are TRYING to catch

16. What species or group of species did you target on your longline sets in 1997? *(Distinguish primary from secondary if necessary)*

	Swordfish		Mahi-mahi		Albacore
	Bigeye Tuna		Yellowfin Tuna		Pelagic sharks
	Other:		Other:		Other:

17. Why that species or group of species?

	Experience		Want to catch the most fish possible
	Equipment cost		Vessel limitations
	Expected price		Have gear for that target
	Season (location of fish)		Trips are shorter
	Season (weather)		Variable costs are lower
	Season (abundance of fish)		Price is steady
	Confidence about catch levels		Catch is steady
	Other:		Other:

18. How do you reconfigure your gear (amount of line, number of hooks, hooks between floats, etc.) in order to target these different species/species groups?

19. Which of the following best describes your fishing strategy in 1997?

A	Did you target the same species (or group) on all your sets and trips? *(e.g. target swordfish every set, every trip)*
B	Did you target the same species (or group) within a trip but switch targets on different trips? *(e.g. target swordfish in the winter and yellowfin tuna in the summer)*
C	Did you switch targets within trips but not on every trip? *(e.g. target swordfish on all trips but switch to bigeye sets towards the end of the trips in summer)*
D	Did you switch targets within a trip on all your trips? *(e.g. target swordfish at beginning of trips but switch to bigeye during second half of trip all year round)*
E	Did you switch targets within a trip and between trips? *(e.g. target swordfish at beginning of trip, switch to bigeye during second half of trip during spring months--In summer months, target yellowfin at beginning of trip, switch to mahi-mahi during second half of trip)*

20. Why did you choose that strategy? Explain. (e.g. weather, catch rates, prices, costs, quotas, closures)

21. Does your boat fish alone or work with other boats? If the latter, which boats?

22. What factors did you take into account when deciding when to go out fishing?

	Fish season		When you are in need of money
	Weather		When crew is available
	By moon phase		Based on condition of the vessel
	When other boats are going out		When other boats are not going out
	Based on last trip's catch or profit		S.O.P. (why that schedule?)
	Based on price you expect to get for the catch		Owner is forcing you to go make money
	Based on catch of incoming vessels		Other:

23. What factors did you take into account when deciding what general area to go to?

	Vessel limitations		Season (location of fish)
	Travel cost		Season (weather)
	Target species		Try different areas until find good one
	Always go to the same area		By weather
	A previously successful area		Satellite/Temperature information
	Information (good catches) from another vessel		Go where other boats are
	Avoid concentrations of other boats		Other:

24. What factors did you take into account when deciding specifically where to set your gear?

	Water currents		Sea surface temperature
	Water color		Temperature gradients/breaks
	Birds & bait		Sea mount location
	Trial and error/test sets		Other:

25. What factors did you take into account when deciding when to come back in?

	Hold is full		Fish are getting old
	Based on what other vessels are doing		Running out of fuel
	Getting tired		S.O.P. (why that schedule?)
	Running out of ice		When get the best price
	Breakdowns		Running out of bait
	Getting a poor catch rate		When caught enough fish: _____ lbs.
	Other:		Other:

Cost Questions:

26. Trip level information:

Most common trip/target:	
Sets per trip:	Hooks per set:
Travel Distance out/back:	
Travel days at sea:	
Total trip cost:	

2nd most common trip/target:	
Sets per trip:	Hooks per set:
Travel distance out/back:	
Travel days at sea:	
Total trip cost:	

Trip Type #1:

Item	Quantity	Price per unit	Total cost	Purchased from:
Fuel per trip				
Ice per trip				
New lightsicks per set				
Bait per set				

Note: if using live bait, ask for:

a) type of bait _____

b) time spent catching bait _____ hours/days (included in days at sea?)

c) why use live rather than dead?

Gear costs per trip (replace hooks, leader, floats, swivels, snaps, etc.): $ _____.

Groceries cost per trip _____.

Other costs per trip _____.

Trip Type #2

Item	Quantity	Price per unit	Total cost	Purchased from:
Fuel per trip				
Ice per trip				
New lightsicks per set				
Bait per set				

Note: if using live bait, ask for:

a) type of bait _____

b) time spent catching bait _____ hours/days (included in days at sea?)

c) why use live rather than dead?

Gear costs per trip (replace hooks, leader, floats, swivels, snaps, etc.): $ _____.

Groceries cost per trip _____.

Other costs per trip _____.

27. Why did you buy from those particular suppliers?

28a. Where/to whom did you sell your fish in 1997?

28b. Why did you sell to/through those particular dealers?

29. How much do you pay in fees for getting your fish sold (per cent, flat fee, or per pound)?

	Auction		Consignment		Packing		Shipping

Labor Questions:

30a. How many people on board total including you? _____.

30b. Does this vary, how much, & why? *Always / Sometimes / Never*

31. How many years, months, or trips have you been:

	Fishing commercially		Captain of a longline vessel
	Longlining		Captain of this vessel

32a. What is the split between the boat and the crew? _____.

32b. Information on crew and share breakdown.

	Experience	How long with you	Crew Share	Related?
Captain				
1st Mate / Deck Boss				
Engineer				
Cook				
Crew 1				
Crew 2				
Crew 3				
Crew 4				
Crew 5				
Crew 6				

33. What are the shared costs?

	Trip costs excluding food (fuel, ice, bait, & fishing gear)
	Trip costs including food (fuel, ice, bait, food & fishing gear)
	Auction / Selling Fees
	Trip Costs excluding food + Auction / Selling fees
	Trip Costs including food + Auction / Selling fees
	Other (BWFA, etc.):

34. If crew share varies according to experience etc., what is the smallest share that is given? _____.

35. On an average trip, how many hours does each crew member spend:

Loading supplies:	hrs.	Laying out the line on each set:	hrs.
Retrieving the line each set:	hrs.	Unloading fish from the boat:	hrs.
Sleeping:	hrs.	Other daily duties (e.g. cooking, watch)	hrs.

Other Costs:

36 a) When was the last time you had the vessel in dry dock? _____

b) How much did dry dock cost? $_____.

c) Where was it done? _____.

d) How often do you go? Every _____ years.

e) Did you and/or the crew do the work or did you pay the yard to do it?

	Captain and crew did the work		Paid the yard to do it		Combination

37. In 1997, how much was spent on your boat for:

$_____ Insurance ({Vessel & Liability}, {V-Hull}, {P & I = L}, {V, L, & Health}) _____.

$_____ Loan Payment *(yearly / monthly)* & how much time remaining on loan _____.

$_____ Maintenance/Repair (non dry dock repairs)

$_____ Mooring Fees *day / week / month / year*

$_____ Utilities *day / week / month / year*

$_____ Bookkeeping/Accounting

$_____ Other (BWFA, travel, etc.) _____.

Miscellaneous Questions:

38a. Did this vessel participate in fisheries other than pelagic longline in 1997? *YES / NO*

38b. If yes, which ones?

	Coastal sharks		South Atlantic Snapper-Grouper		Gulf of Mexico Reef Fish
	King Mackerel		Spanish Mackerel		Wreckfish
	Other:		Other:		Other:

38c. If permits are required in any of these other fisheries, how much did you have to pay for each of them?

38d. How much, if anything, does it cost to switch between pelagic longline and the other fisheries you participate in? Describe these costs.

39a. What percentage of your family's income came from fishing vs. non-fishing activities in 1997?

	Captain	Owner
Fishing		
Non-Fishing		

39b. What percentage of your fishing related income came from each of the fisheries you participate in?

	Captain	Owner
Fishery 1		
Fishery 2		
Fishery 3		
Fishery 4		

40. On a scale of 1-10, if your least profitable year was a "1" and your most profitable was a "10", how would you rate the Pelagic Longline Fishery in 1997 compared to past years in the Pelagic Longline Fishery?

Captain:		Owner:	
Reasons / Rationale?		Reasons / Rationale?	

41a. Would you sell this vessel if you could? *YES / NO*

41b. If yes, why haven't you?

42. What is the vessel's appraised value? (done for insurance purposes)?

$ _____ (is this *market* or *replacement* value?)

43. What do you estimate you could sell the vessel for?

$ _____

44a. Have you relocated your vessel from one region/area to another? *YES NO*

44b. If yes, from where to where? _____

When was this? _____

44c. Cost of relocation each time? $ _____

44d. Why did you relocate in each instance?

45. If you've had to refit your vessel for pelagic longlining, how much did it cost?

$ _____

46. When did this vessel enter the pelagic longline fishery? (If can't answer, go to #47) _____

47. What fishery did the vessel originally come from / participate in prior to pelagic longlining

48. What were your main reasons for entering the pelagic longline fishery?

49. What are your main reasons for staying in the pelagic longline fishery?

Demographics:

(Ask owner AND captain)

50. Do you own other fishing vessels besides this one?
(Captain *YES / NO*) (Owner *YES / NO*)
If yes, what are they used for? _____.
Where are they? _____.

51. How old you are?
Captain _____ Owner _____

52. Are any of your close relatives commercial fishermen? (e.g. Uncle, brother)

Captain:	*YES / NO*	Owner:	*YES / NO*
Family/Relatives:		Family/Relatives:	

53. How do you describe your racial or ethnic background?
Captain: _____.
Owner: _____.

54. What's the highest level of education you achieved? *(use "C" for captain and "O" for owner).*

	HS or less		HS graduate		Some college		College graduate		Graduate school

55. Is there anything else you'd like to say? What do you think would be the best way to manage the pelagic longline fishery? What would you like NMFS to do? How would you like to see things change? Is there anything that you think should be changed with regard to data collection? For example: area closures, vessel monitoring, observers, coast guard, piers, and quotas, permit transferability, limited entry, etceteras

We will summarize what you've told us and send you a copy so that you can make sure we haven't made any mistakes. Can I get your mailing address?

Captain			*Owner*		
Name:			Name:		
Street:		Apt:	Street:		Apt:
City:	ST:	ZIP:	City:	ST:	ZIP:

Vessel name: _____.

Can I also get your phone number in case I have any further (small) questions?

Phone :_____

APPENDIX II: SUMMARY OF PRICES

Swordfish Price Schedules

month	all	small			medium			large			
		sword	mixed	tuna	sword	mixed	tuna	sword	mixed	tuna	
1	4.21	4.95	4.62	4.81	4.04	4.14	4.42	3.74	3.98	3.32	
2	4.03	4.54	4.35	4.23	4.04	3.77	3.89	3.73	3.88	3.32	
3	4.09	4.63	4.42	4.06	4.08	4.12	4.34	3.74	3.82	3.31	
4	3.93	4.27	4.28	4.23	3.82	4.31	3.55	3.74	3.72	3.31	
5	4.82	5.15	5.01	4.95	4.77	4.90	3.80	3.74	4.13		
6	4.23	4.81	4.54	4.25	3.91	4.41	4.16	3.91	3.95	3.31	
7	4.36	4.56	4.56	3.99	3.99	4.63	4.09	4.28	4.34	3.33	
8	3.85	3.95	4.07	3.90	3.57	4.33	3.49	3.60	4.16	3.32	
9	2.94	3.06	3.21	2.88	2.94	3.38	3.15	2.60	2.80	3.31	
10	3.10	4.07	4.01	3.95	2.80	3.98	3.46	2.76	2.97	3.32	
11	3.54	3.60	3.67	3.57	3.75	3.41	3.44	3.32	3.35	3.32	
12	3.93	4.19	4.03	4.09	3.86	4.04	3.54	3.85	3.80	3.32	

	region					vessel size			target		
	car	gom	ma	ne	sa	large	medium	small	sword	mixed	tuna
1	3.75	4.02	4.00	3.74	4.87	3.83	4.13	4.81	4.20	4.20	4.39
2	3.78	3.78	3.92	3.74	4.41	3.83	3.89	4.44	4.16	3.93	4.03
3	3.84	3.96	4.08	3.74	4.60	3.76	4.15	4.50	4.09	4.08	4.15
4	3.74	3.90	4.13	3.74	4.33	3.73	3.95	4.27	3.87	4.01	3.92
5	3.80	3.68	5.12	3.74	5.14	4.06	4.76	5.09	4.97	4.76	4.42
6	3.80	3.82	4.71	4.99	4.61	3.92	4.10	4.65	4.21	4.27	4.04
7	4.05	3.85	4.74	4.21	4.58	4.30	4.28	4.54	4.27	4.50	3.87
8	3.55	3.70	3.86	4.27	4.02	3.80	3.82	4.00	3.65	4.18	3.64
9	2.70	3.24	3.12	2.60	3.15	2.75	3.17	3.09	2.87	2.98	2.98
10	2.64	3.83	3.00	2.94	4.05	2.83	2.93	4.04	2.98	3.39	3.71
11	3.68	3.39	3.44	3.48	3.61	3.35	3.51	3.64	3.65	3.49	3.44
12	3.75	3.75	4.06	4.29	4.14	3.82	3.92	4.11	3.93	3.94	3.66

Bigeye Tuna Price Schedules

month	all	small			medium			large			
		sword	mixed	tuna	sword	mixed	tuna	sword	mixed	tuna	
1	3.38	3.13	3.22	3.25	3.44	3.41	4.01	3.42	3.45	4.27	
2	3.34	2.99	3.10	2.22	3.36	3.27	3.42	3.41	3.36		
3	3.38	3.16	2.64		3.43	3.33	3.28	3.43	3.41	4.27	
4	3.39	3.16	3.11	1.08	3.44	3.44		3.43	3.44		
5	3.34	3.03	3.10	2.99	2.91	3.83	2.41	3.41	3.48		
6	3.48	2.92	3.60	3.41	3.49	3.52	3.28	3.43	3.66	4.27	
7	3.18	2.84	3.14	5.98	3.29	3.48	2.77	2.46	3.24	4.27	
8	3.49	3.17	3.48	4.59	3.87	3.62	3.38	3.19	3.55	4.27	
9	2.94	2.44	2.92	3.09	2.58	3.03	3.58	3.10	2.87	4.27	
10	3.23	3.02	2.94	2.83	3.79	3.37	3.26	2.98	3.26		
11	3.76	2.74	3.19	3.57	3.43	3.67	3.08	3.26	4.12	4.27	
12	4.49	2.90	4.33		2.99	5.54	3.10	2.69	4.41	4.27	

	region					vessel size			target		
	car	gom	ma	ne	sa	large	medium	small	sword	mixed	tuna
1	3.41	3.78	3.35	3.39	3.22	3.45	3.44	3.18	3.35	3.38	4.00
2	3.37	3.57	3.59	3.43	3.09	3.39	3.31	3.03	3.37	3.32	3.29
3	3.40	3.77	3.43	3.43	2.85	3.43	3.41	2.74	3.42	3.33	4.14
4	3.43	3.81	3.34	3.45	2.87	3.44	3.44	2.83	3.42	3.42	1.08
5	3.39	3.51	3.72	3.43	2.97	3.44	3.54	3.04	3.28	3.54	2.77
6	3.45	3.59	3.72	3.50	3.12	3.59	3.51	3.24	3.29	3.59	3.59
7	3.17	3.59	3.41	2.40	3.08	2.92	3.37	3.14	2.90	3.32	3.42
8	3.46	3.71	3.70	3.34	3.30	3.31	3.69	3.47	3.33	3.55	4.47
9	2.94	3.60	2.98	2.83	2.92	2.92	3.03	2.84	2.73	2.94	3.48
10	3.51	3.59	3.25	3.00	3.18	3.17	3.38	2.95	3.12	3.25	3.24
11	4.22	3.81	4.04	3.51	3.48	4.11	3.64	3.06	2.88	3.82	3.35
12	2.98	3.81	5.15	2.60	4.32	4.21	5.06	4.02	2.86	4.81	3.50

Yellowfin Tuna Price Schedules

month	all	small			medium			large			
		sword	mixed	tuna	sword	mixed	tuna	sword	mixed	tuna	
1	3.41	3.37	3.05	3.39	2.93	3.45	3.51	3.15	3.42	3.50	
2	3.05	2.95	2.90	3.03	2.90	3.12	3.11	2.93	3.06	3.15	
3	2.99	3.17	2.85	3.34	2.94	3.01	3.15	2.94	2.99	3.15	
4	2.97	3.00	2.87	3.30	2.98	2.98	3.13	2.92	2.90	3.05	
5	2.99	2.59	2.82	2.96	3.05	3.02	3.04	2.91	3.02	3.15	
6	2.98	2.86	2.88	2.93	2.93	2.95	3.05	2.94	3.01	3.15	
7	2.93	2.70	2.91	2.99	2.92	2.85	3.06	2.86	3.03	3.11	
8	3.14	3.34	3.04	3.17	3.08	3.17	3.25	2.80	3.02	3.27	
9	3.28	2.55	2.94	2.70	3.45	3.27	3.72	3.92	3.48	4.00	
10	2.94	2.55	2.77	3.19	2.51	2.99	2.95	2.98	2.95	3.20	
11	2.89	2.55	2.82	3.50	2.70	2.86	2.94	3.15	2.87	3.36	
12	3.14	3.48	3.10	5.25	2.97	3.11	3.27	3.09	3.06	3.19	

	region					vessel size			target		
	car	gom	ma	ne	sa	large	medium	small	sword	mixed	tuna
1	2.92	3.45	2.85	2.91	3.27	3.40	3.46	3.20	3.15	3.41	3.50
2	2.91	3.12	2.95	2.92	2.93	3.03	3.08	2.96	2.92	3.08	3.09
3	2.92	3.13	2.65	2.91	2.89	2.98	3.03	2.92	2.95	2.98	3.16
4	2.92	3.16	2.43	2.91	2.89	2.91	3.01	3.05	2.94	2.92	3.18
5	2.92	3.09	2.79	2.91	2.44	3.00	3.03	2.82	2.88	3.00	3.03
6	2.88	3.10	2.67	2.37	2.53	3.02	2.99	2.90	2.92	2.97	3.04
7	2.86	3.12	2.59	2.19	2.57	3.02	2.91	2.88	2.81	2.91	3.05
8	2.51	3.19	2.89	2.56	3.35	3.04	3.20	3.10	3.04	3.11	3.23
9	2.71	3.85	2.30	1.81	2.59	3.55	3.41	2.81	3.14	3.26	3.35
10	2.81	3.17	2.75	2.54	2.63	2.98	2.97	2.83	2.76	2.93	3.03
11	2.88	3.14	2.56	2.48	2.29	2.92	2.90	2.82	2.64	2.86	3.01
12	2.93	3.16	2.96	3.46	3.16	3.07	3.17	3.29	3.15	3.08	3.26

Mahi-mahi Price Schedules

month	all	small			medium			large			
		sword	mixed	tuna	sword	mixed	tuna	sword	mixed	tuna	
1	1.20	1.33	1.31	1.40	1.10	1.17	0.97	1.18	1.10	0.92	
2	1.19	1.26	1.29	1.03	1.21	1.15	0.91	1.20	1.20	0.92	
3	1.27	1.61	1.45	1.55	1.23	1.24	0.98	1.18	1.23	0.91	
4	1.61	1.61	1.69	1.47	1.32	1.62	0.89	1.20	1.63	1.04	
5	1.30	1.21	1.26	1.49	1.32	1.19	1.41	1.20	1.20	0.92	
6	1.20	1.32	1.28	1.28	1.25	1.22	1.14	0.67	1.15	0.92	
7	1.28	1.36	1.35	1.08	1.39	1.19	1.39	1.00	1.10	1.03	
8	1.21	1.56	1.32	1.38	1.35	1.10	1.12	1.29	0.99	1.15	
9	1.36	1.51	1.35	1.46	1.51	1.33	1.33	1.26	1.23	1.25	
10	1.23	1.45	1.38	1.05	1.59	1.13	1.22	0.66	1.11	0.95	
11	1.30	1.53	1.46	1.56	1.52	1.11	0.95	0.92	1.02	0.92	
12	1.25	1.41	1.46		1.33	1.27	0.88	1.22	1.20	0.92	

	region					vessel size			target		
	car	gom	ma	ne	sa	large	medium	small	sword	mixed	tuna
1	1.20	0.96	1.24	1.20	1.30	1.13	1.13	1.33	1.24	1.18	1.04
2	1.20	0.93	1.22		1.27	1.20	1.16	1.26	1.22	1.18	0.92
3	1.29	1.02	1.37	1.20	1.53	1.20	1.17	1.55	1.31	1.27	1.19
4	1.21	1.07	1.72	1.20	1.66	1.60	1.55	1.66	1.45	1.64	1.32
5	1.21	1.42	1.14	1.20	1.30	1.20	1.29	1.34	1.26	1.21	1.44
6	0.62	1.10	1.28	1.13	1.24	1.08	1.19	1.29	1.22	1.22	1.17
7	0.56	1.06	1.40	1.12	1.45	1.08	1.32	1.31	1.32	1.22	1.33
8	1.84	1.09	1.55	1.25	1.46	1.07	1.13	1.41	1.44	1.11	1.24
9	1.92	1.25	1.35	1.53	1.48	1.23	1.35	1.43	1.50	1.31	1.41
10	0.64	1.01	1.24	0.99	1.38	1.06	1.19	1.39	1.39	1.18	1.10
11	1.20	1.01	1.48		1.51	1.01	1.15	1.51	1.51	1.19	1.14
12	1.29	0.90	1.29	1.50	1.47	1.20	1.20	1.42	1.34	1.26	0.88

APPENDIX III: SUMMARY OF LANDINGS

Abbreviations:

Nv: Number of Vessels in the listed category	Nt: Number of Trips in the listed category
TL: Total Landings	
ALv: Average Annual Landings per Vessel	ALt: Average Landings per Trip
SD ALv: Standard Deviation of ALv	SD ALt: Standard Deviation of ALt
Min ALv: Minimum Value of ALv	Min ALt: Minimum Value of ALt
Max ALv: Maximum Value of ALv	Max Alt: Maximum Value of ALt

ALL: All catch categories	
PLGC: Swordfish, BAYS, and Dolphinfish	SWO: Swordfish
BAYS: Bigeye, Albacore, Yellowfin and Skipjack tunas	BET: Bigeye tuna
YFT: Yellowfin tuna	DOL: Dolphinfish
SHRK: Pelagic sharks, large coastal sharks, and shark fins	OTHR: Other fish

Unless otherwise noted: all figures are in pounds

All Vessels All Trips

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR
Nv	240	240	240	240	240	240	240	240	240
TL	16072188	15008559	5483000	7593958	1312829	5929266	1931600	508356	555274
ALv	66967	62536	22846	31641	5470	24705	8048	2118	2314
SD ALv	61285	59133	33148	30179	9195	26124	26568	3356	2855
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	453259	429383	195905	108718	49329	96062	336706	22930	14111
Nt	3114	3114	3114	3114	3114	3114	3114	3114	3114
ALt	5161	4820	1761	2439	422	1904	620	163	178
SD ALt	7719	7541	4177	3745	1350	3104	4611	477	378
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	149727	137793	34411	39352	14032	30557	137559	6389	11934

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

Surveyed Vessels

Nv	110	110	110	110	110	110	110	110	110
TL	8856708	8278989	3330656	3601535	875454	2494865	1346797	359289	218430
ALv	80516	75264	30279	32741	7959	22681	12244	3266	1986
SD ALv	67937	65933	36765	29547	10591	22949	36877	4220	2508
Min ALv	708	429	42	0	0	0	0	0	0
Max ALv	453259	429383	195905	108718	49329	92476	336706	22930	13096
Nt	1598	1598	1598	1598	1598	1598	1598	1598	1598
ALt	5542	5181	2084	2254	548	1561	843	225	137
SD ALt	8883	8678	4540	3791	1495	2898	6037	574	391
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	149727	137793	32764	39352	14032	30557	137559	6389	11934

Non-Surveyed Vessels

Nv	130	130	130	130	130	130	130	130	130
TL	7215480	6729570	2152344	3992423	437374	3434401	584803	149067	336843
ALv	55504	51766	16556	30711	3364	26418	4498	1147	2591
SD ALv	52628	50500	28401	30787	7219	28512	11447	1936	3102
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	244833	240318	152543	99705	34588	96062	90825	13755	14111
Nt	1516	1516	1516	1516	1516	1516	1516	1516	1516
ALt	4760	4439	1420	2634	289	2265	386	98	222
SD ALt	6240	6098	3727	3687	1163	3269	2271	334	359
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	68872	67994	34411	33073	13855	30003	62608	4558	3421

By Region

New England (NE)									
Nv	8	8	8	8	8	8	8	8	8
TL	1044210	1012500	595893	401616	170320	204151	14991	27280	4430
ALv	130526	126563	74487	50202	21290	25519	1874	3410	554
SD ALv	91181	88044	56773	33785	15710	17027	2484	3162	390
Min ALv	4562	4429	200	4182	0	315	0	105	28
Max ALv	235829	229766	152543	100805	49329	46472	7034	8011	1357
Nt	48	48	48	48	48	48	48	48	48
ALt	21754	21094	12414	8367	3548	4253	312	568	92
SD ALt	14393	14198	11688	8818	3588	6851	815	847	160
Min ALt	1130	1025	0	532	0	0	0	0	0
Max ALt	49463	49289	32716	39352	14032	30557	4800	3366	531

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Region (continued)

Mid-Atlantic (MA)									
Nv	38	38	38	38	38	38	38	38	38
TL	2441132	2302939	764456	1294912	430664	730628	243571	108914	29279
ALv	64240	60604	20117	34077	11333	19227	6410	2866	770
SD ALv	54067	51457	24860	25641	10253	14447	15445	3002	739
Min ALv	892	429	42	303	0	303	0	0	0
Max ALv	224496	208935	121339	94944	38452	55099	90825	13755	2864
Nt	357	357	357	357	357	357	357	357	357
ALt	6838	6451	2141	3627	1206	2047	682	305	82
SD ALt	7020	6916	3995	4011	1962	2808	3837	537	146
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	68872	67994	34411	26895	12645	22468	62608	4558	967

South-Atlantic (SA)									
Nv	82	82	82	82	82	82	82	82	82
TL	4444843	4094137	1658457	1246482	358327	775283	1189198	266868	83837
ALv	54205	49929	20225	15201	4370	9455	14502	3254	1022
SD ALv	64575	61316	18603	23681	6647	15448	41149	4697	1678
Min ALv	208	208	189	0	0	0	0	0	0
Max ALv	453259	429383	76893	108718	30381	72971	336706	22930	13096
Nt	1573	1573	1573	1573	1573	1573	1573	1573	1573
ALt	2826	2603	1054	792	228	493	756	170	53
SD ALt	6577	6347	1531	2250	801	1612	5753	535	326
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	149727	137793	14817	25443	11060	21080	137559	6389	11934

Gulf of Mexico (GOM)									
Nv	93	93	93	93	93	93	93	93	93
TL	5565028	5079920	790649	3839996	34401	3775340	449275	70246	414862
ALv	59839	54623	8502	41290	370	40595	4831	755	4461
SD ALv	38159	35593	11099	30362	529	29866	13595	1234	3253
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	155961	152500	51553	96184	2738	96062	130886	7067	14111
Nt	963	963	963	963	963	963	963	963	963
ALt	5779	5275	821	3988	36	3920	467	73	431
SD ALt	4361	4257	1397	3084	104	3054	3007	258	423
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	86259	86259	8877	17634	1637	17064	85981	4130	3421

Caribbean (CAR)									
Nv	19	19	19	19	19	19	19	19	19
TL	2576976	2519062	1673545	810952	319117	443865	34565	35049	22865
ALv	135630	132582	88081	42682	16796	23361	1819	1845	1203
SD ALv	81412	80759	55597	32497	12292	21389	2947	1620	1097
Min ALv	13798	12968	10871	914	110	611	126	0	248
Max ALv	256761	250892	195905	99705	34588	62075	13290	5273	3723
Nt	173	173	173	173	173	173	173	173	173
ALt	14896	14561	9674	4688	1845	2566	200	203	132
SD ALt	13714	13590	10420	6620	2888	5129	687	447	197
Min ALt	50	50	0	0	0	0	0	0	0
Max ALt	45070	44703	33441	31501	13855	30003	7962	3175	1613

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size

Small (S)									
Nv	106	106	106	106	106	106	106	106	106
TL	3762746	3418446	1469176	1353530	277801	1019427	595740	216157	128143
ALv	35498	32249	13860	12769	2621	9617	5620	2039	1209
SD ALv	32727	30790	16592	16900	4908	14735	15095	3343	1947
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	155961	152500	76893	90252	24281	89864	130886	22930	14111
Nt	1583	1583	1583	1583	1583	1583	1583	1583	1583
ALt	2377	2159	928	855	175	644	376	137	81
SD ALt	3366	3286	1319	1677	610	1437	2639	412	189
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	86259	86259	11847	12525	8641	12407	85981	5528	2768

Medium (M)									
Nv	85	85	85	85	85	85	85	85	85
TL	7007080	6525552	1854882	3604387	468066	2963019	1066283	196411	285117
ALv	82436	76771	21822	42405	5507	34859	12545	2311	3354
SD ALv	67932	65193	34169	30523	8575	27333	40058	3913	3148
Min ALv	1586	1470	0	0	0	0	0	0	0
Max ALv	453259	429383	195905	108718	30381	92476	336706	20362	13096
Nt	1059	1059	1059	1059	1059	1059	1059	1059	1059
ALt	6617	6162	1752	3404	442	2798	1007	185	269
SD ALt	8934	8702	3981	3811	1271	3297	7024	567	525
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	149727	137793	32092	25443	11060	21080	137559	6389	11934

Large (L)									
Nv	49	49	49	49	49	49	49	49	49
TL	5302363	5064561	2158943	2636040	566962	1946821	269578	95789	142013
ALv	108211	103358	44060	53797	11571	39731	5502	1955	2898
SD ALv	62729	61755	46756	28054	13553	26458	12360	2180	3162
Min ALv	2642	2135	916	0	0	0	0	0	0
Max ALv	256761	250892	152543	100805	49329	96062	77292	8011	13035
Nt	472	472	472	472	472	472	472	472	472
ALt	11234	10730	4574	5585	1201	4125	571	203	301
SD ALt	10428	10328	7974	5495	2520	4499	2396	454	374
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	52291	51448	34411	39352	14032	30557	30698	3366	2508

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Target

Swordfish (S)									
Nv	68	68	68	68	68	68	68	68	68
TL	4509098	4285098	2811180	1135022	405538	668647	338897	137000	86999
ALv	66310	63016	41341	16691	5964	9833	4984	2015	1279
SD ALv	68189	67033	46643	23465	9530	15067	10350	2472	1821
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	256761	250892	195905	88223	33560	65325	63760	11960	9703
Nt	1053	1053	1053	1053	1053	1053	1053	1053	1053
ALt	4282	4069	2670	1078	385	635	322	130	83
SD ALt	8027	7897	5727	3184	1352	2272	2168	367	205
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	57271	57015	34411	39352	13855	30557	56753	3396	3421

Mixed (M)									
Nv	120	120	120	120	120	120	120	120	120
TL	8860017	8260991	2424884	4873455	864025	3734038	962652	296648	302378
ALv	73833	68842	20207	40612	7200	31117	8022	2472	2520
SD ALv	53371	51116	24907	31654	10181	27734	17407	3924	3009
Min ALv	892	429	0	0	0	0	0	0	0
Max ALv	244833	240318	141677	108718	49329	96062	103275	22930	14111
Nt	1579	1579	1579	1579	1579	1579	1579	1579	1579
ALt	5611	5232	1536	3086	547	2365	610	188	191
SD ALt	6659	6545	3338	4006	1502	3309	3617	552	334
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	72728	72728	33441	31501	14032	30003	72512	6389	3334

Tuna (T)									
Nv	52	52	52	52	52	52	52	52	52
TL	2703074	2462469	246937	1585481	43265	1526581	630051	74708	165896
ALv	51982	47355	4749	30490	832	29357	12116	1437	3190
SD ALv	67123	63705	6092	26799	2393	26297	49304	2840	3227
Min ALv	1697	990	80	0	0	0	0	0	0
Max ALv	453259	429383	27699	91923	14602	90599	336706	14748	13096
Nt	482	482	482	482	482	482	482	482	482
ALt	5608	5109	512	3289	90	3167	1307	155	344
SD ALt	9833	9449	1034	3132	475	3051	9149	415	648
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	149727	137793	8877	20739	5859	20140	137559	3343	11934

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category

Small-Swordfish (A)									
Nv	39	39	39	39	39	39	39	39	39
TL	1321390	1210507	791367	235386	78164	143462	183754	73746	37137
ALv	33882	31039	20291	6036	2004	3679	4712	1891	952
SD ALv	33404	31214	19467	10568	4332	6310	8762	2660	1181
Min ALv	59	45	0	0	0	0	0	0	0
Max ALv	137475	131565	76893	44053	20764	21460	48615	11960	5253
Nt	723	723	723	723	723	723	723	723	723
ALt	1828	1674	1095	326	108	198	254	102	51
SD ALt	2210	2115	1413	801	388	536	1365	287	111
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	28336	28336	11847	5678	3188	4520	28336	3267	954

Small-Mixed (B)									
Nv	43	43	43	43	43	43	43	43	43
TL	1742160	1588870	581669	779367	185480	554777	227834	97871	55419
ALv	40515	36950	13527	18125	4313	12902	5298	2276	1289
SD ALv	31722	29637	15559	20616	6076	18543	10778	3870	2308
Min ALv	892	429	42	0	0	0	0	0	0
Max ALv	105880	96780	74216	90252	24281	89864	56147	22930	14111
Nt	659	659	659	659	659	659	659	659	659
ALt	2644	2411	883	1183	281	842	346	149	84
SD ALt	2840	2717	1311	2046	831	1700	1476	490	219
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	16944	14470	11362	12525	8641	12407	14376	5528	2768

Small-Tuna (C)									
Nv	24	24	24	24	24	24	24	24	24
TL	699196	619069	96140	338777	14157	321188	184151	44540	35587
ALv	29133	25795	4006	14116	590	13383	7673	1856	1483
SD ALv	33390	32048	4102	14521	1107	14241	26368	3436	2254
Min ALv	1697	990	101	0	0	0	0	0	0
Max ALv	155961	152500	13062	55729	3395	55729	130886	14748	8923
Nt	201	201	201	201	201	201	201	201	201
ALt	3479	3080	478	1685	70	1598	916	222	177
SD ALt	6549	6560	771	2027	258	2007	6390	490	259
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	86259	86259	5644	10149	2198	10030	85981	3343	1199

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category (continued)

Medium-Swordfish (D)									
Nv	17	17	17	17	17	17	17	17	17
TL	1516871	1453436	1014955	316180	116494	181923	122300	30570	32865
ALv	89228	85496	59703	18599	6853	10701	7194	1798	1933
SD ALv	75358	75297	58035	23784	9831	15202	15711	1826	2614
Min ALv	1586	1470	887	0	0	0	0	0	0
Max ALv	251528	248305	195905	87608	30108	55026	63760	6690	9703
Nt	243	243	243	243	243	243	243	243	243
ALt	6242	5981	4177	1301	479	749	503	126	135
SD ALt	9569	9479	7130	2976	1375	2040	3800	374	320
Min ALt	47	47	0	0	0	0	0	0	0
Max ALt	57271	57015	32092	20461	9538	17255	56753	3396	3421

Medium-Mixed (E)									
Nv	43	43	43	43	43	43	43	43	43
TL	3718624	3446721	717979	2209271	324880	1740427	519471	135930	135974
ALv	86480	80156	16697	51378	7555	40475	12081	3161	3162
SD ALv	52015	48984	15711	30163	9342	26419	23415	4970	2978
Min ALv	8342	8079	0	914	0	611	30	0	0
Max ALv	241127	228756	68849	108718	30381	92476	103275	20362	10005
Nt	574	574	574	574	574	574	574	574	574
ALt	6478	6005	1251	3849	566	3032	905	237	237
SD ALt	6770	6712	1953	3971	1398	3329	5373	687	365
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	72728	72728	14817	25443	11060	21080	72512	6389	3334

Medium-Tuna (F)									
Nv	25	25	25	25	25	25	25	25	25
TL	1771584	1625395	121948	1078936	26692	1040669	424511	29911	116278
ALv	70863	65016	4878	43157	1068	41627	16980	1196	4651
SD ALv	86194	81721	6808	27298	3295	26864	66716	2314	3370
Min ALv	4562	4429	80	4182	0	4182	45	0	28
Max ALv	453259	429383	27699	91923	14602	90599	336706	10780	13096
Nt	242	242	242	242	242	242	242	242	242
ALt	7321	6717	504	4458	110	4300	1754	124	480
SD ALt	12197	11607	1174	3365	626	3252	11516	368	851
Min ALt	71	0	0	0	0	0	0	0	0
Max ALt	149727	137793	8877	20739	5859	20140	137559	3067	11934

Large-Swordfish (G)									
Nv	12	12	12	12	12	12	12	12	12
TL	1670837	1621155	1004858	583456	210881	343262	32842	32684	16997
ALv	139236	135096	83738	48621	17573	28605	2737	2724	1416
SD ALv	76581	75379	54682	24992	11997	19727	3849	2693	2091
Min ALv	4308	4108	916	0	0	0	0	0	0
Max ALv	256761	250892	152543	88223	33560	65325	13290	8011	6345
Nt	87	87	87	87	87	87	87	87	87
ALt	19205	18634	11550	6706	2424	3946	377	376	195
SD ALt	14238	14119	11592	7536	3301	6027	1044	705	303
Min ALt	361	361	0	0	0	0	0	0	0
Max ALt	52291	51448	34411	39352	13855	30557	7962	3366	1393

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category (continued)

Large-Mixed (H)									
Nv	34	34	34	34	34	34	34	34	34
TL	3399232	3225400	1125236	1884817	353665	1438834	215347	62847	110985
ALv	99977	94865	33095	55436	10402	42319	6334	1848	3264
SD ALv	56468	55321	37006	29631	13933	27786	14593	1988	3392
Min ALv	2642	2135	1565	252	0	130	0	0	127
Max ALv	244833	240318	141677	100805	49329	96062	77292	6613	13035
Nt	346	346	346	346	346	346	346	346	346
ALt	9824	9322	3252	5447	1022	4158	622	182	321
SD ALt	8687	8604	6119	5073	2323	4216	2732	381	391
Min ALt	0	0	0	0	0	0	0	0	0
Max ALt	49137	48368	33441	31501	14032	30003	30698	3254	2508

Large-Tuna (I)									
Nv	3	3	3	3	3	3	3	3	3
TL	232294	218006	28849	167768	2416	164725	21388	257	14031
ALv	77431	72669	9616	55923	805	54908	7129	86	4677
SD ALv	34960	33140	12421	27440	398	26809	3064	84	2432
Min ALv	38114	35031	1159	28149	345	27804	5022	0	2917
Max ALv	105015	97473	23877	83016	1035	81412	10644	167	7452
Nt	39	39	39	39	39	39	39	39	39
ALt	5956	5590	740	4302	62	4224	548	7	360
SD ALt	3420	3264	1273	2722	120	2689	916	21	320
Min ALt	500	220	0	220	0	220	0	0	0
Max ALt	14992	14349	6134	10255	597	10255	4185	85	1391

APPENDIX IV: SUMMARY OF REVENUES

Abbreviations:

Nv: Number of Vessels in the listed category	Nt: Number of Trips in the listed category
TR: Total Revenue	
ARv: Average Annual Revenue per Vessel	ARt: Average Revenue per Trip
SD ARv: Standard Deviation of Arv	SD ARt: Standard Deviation of ARt
Min ARv: Minimum Value of Arv	Min ARt: Minimum Value of ARt
Max ARv: Maximum Value of Arv	Max ARt: Maximum Value of ARt

ALL: All catch categories	
PLGC: Swordfish, BAYS, and Dolphinfish	SWO: Swordfish
BAYS: Bigeye, Albacore, Yellowfin and Skipjack tunas	BET: Bigeye tuna
YFT: Yellowfin tuna	DOL: Dolphinfish
SHRK: Pelagic sharks, large coastal sharks, and shark fins	OTHR: Other fish

Unless otherwise noted: all figures are in US dollars

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

All Vessels All Trips

Nv	240	240	240	240	240	240	240	240	240
TR	48169860	46691263	21117854	23108275	4424526	18257263	2465135	552974	925623
ARv	200708	194547	87991	96284	18436	76072	10271	2304	3857
SD ARv	176682	173388	120441	94097	31662	84668	36152	3226	4374
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	834444	822935	673433	311352	148578	307429	463807	18165	32660
Nt	3114	3114	3114	3114	3114	3114	3114	3114	3114
ARt	15469	14994	6782	7421	1421	5863	792	178	297
SD ARt	21210	20909	14855	11579	4657	9750	6066	484	824
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	184091	182969	128767	117027	48131	89074	156818	6868	26732

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

Surveyed Vessels

Nv	110	110	110	110	110	110	110	110	110
TR	26143024	25307613	12874232	10666101	2996140	7388096	1767280	385952	449459
ARv	237664	230069	117038	96965	27238	67165	16066	3509	4086
SD ARv	186798	183290	131585	90248	37231	73448	50572	3884	4845
Min ARv	2129	1189	189	0	0	0	0	0	0
Max ARv	834444	822935	673433	311352	148578	307429	463807	18165	32660
Nt	1598	1598	1598	1598	1598	1598	1598	1598	1598
ARt	16360	15837	8056	6675	1875	4623	1106	242	281
SD ARt	22877	22512	16013	11505	5271	8879	8007	585	965
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	184091	165258	124641	117027	48131	89074	156818	6868	26732

Non-Surveyed Vessels

Nv	130	130	130	130	130	130	130	130	130
TR	22026836	21383651	8243622	12442173	1428386	10869167	697855	167021	476164
ARv	169437	164490	63412	95709	10988	83609	5368	1285	3663
SD ARv	161869	159141	104485	97579	23750	92727	14409	2063	3941
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	810755	800056	573307	300327	114149	297431	108531	12621	13884
Nt	1516	1516	1516	1516	1516	1516	1516	1516	1516
ARt	14530	14105	5438	8207	942	7170	460	110	314
SD ARt	19262	19041	13402	11608	3849	10436	2792	335	641
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	183725	182969	128767	98553	47523	87460	67554	4255	8483

By Region

New England (NE)									
Nv	8	8	8	8	8	8	8	8	8
TR	3330917	3274983	2117643	1139676	544212	570309	17664	32915	23019
ARv	416365	409373	264705	142459	68026	71289	2208	4114	2877
SD ARv	299989	294570	207168	95379	47177	49313	2847	3615	3555
Min ARv	8077	7923	533	7318	0	780	0	113	41
Max ARv	810755	800056	573307	269672	146805	133459	8216	8304	11152
Nt	48	48	48	48	48	48	48	48	48
ARt	69394	68229	44118	23743	11338	11881	368	686	480
SD ARt	46557	46321	40262	27005	11562	20031	950	999	1183
Min ARt	1904	1791	0	1750	0	0	0	0	0
Max ARt	165500	165258	124641	117027	48131	89074	5764	3777	5358

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Region (continued)

Mid-Atlantic (MA)									
Nv	38	38	38	38	38	38	38	38	38
TR	7239532	6969462	3010060	3651917	1549885	1925581	307485	145938	124132
ARv	190514	183407	79212	96103	40786	50673	8092	3840	3267
SD ARv	159548	155784	92478	75291	39319	40210	18576	3797	3526
Min ARv	2129	1189	189	870	0	695	0	0	0
Max ARv	594896	587739	441850	281168	148578	177394	108531	14864	11530
Nt	357	357	357	357	357	357	357	357	357
ARt	20279	19522	8432	10229	4341	5394	861	409	348
SD ARt	20081	19879	14747	11844	7306	7678	4392	686	812
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	183725	182969	128767	80601	43373	65494	67554	6868	4650

South-Atlantic (SA)									
Nv	82	82	82	82	82	82	82	82	82
TR	12590352	12133714	7133757	3429914	1137106	2151945	1570043	255851	200786
ARv	153541	147972	86997	41828	13867	26243	19147	3120	2449
SD ARv	147321	142011	80939	66852	22497	44648	55729	3897	4872
Min ARv	843	843	833	0	0	0	0	0	0
Max ARv	778427	736509	330477	303726	99262	212596	463807	18165	32660
Nt	1573	1573	1573	1573	1573	1573	1573	1573	1573
ARt	8004	7714	4535	2180	723	1368	998	163	128
SD ARt	12590	12151	6858	6492	2683	4841	7486	463	845
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	184091	157359	66952	79078	39796	70428	156818	6246	26732

Gulf of Mexico (GOM)									
Nv	93	93	93	93	93	93	93	93	93
TR	16594024	15998992	2976032	12489802	126772	12326735	533157	76009	519024
ARv	178430	172032	32000	134299	1363	132546	5733	817	5581
SD ARv	111613	108597	44280	98991	1997	97765	20181	1385	3859
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	382614	369596	211797	311352	9295	307429	195019	8121	13884
Nt	963	963	963	963	963	963	963	963	963
ARt	17232	16614	3090	12970	132	12800	554	79	539
SD ARt	11308	11195	5556	10299	403	10219	4479	275	670
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	131091	131091	39805	70690	6997	68254	130347	3496	5440

Caribbean (CAR)									
Nv	19	19	19	19	19	19	19	19	19
TR	8415034	8314113	5880362	2396965	1066551	1282694	36785	42260	58662
ARv	442897	437585	309493	126156	56134	67510	1936	2224	3087
SD ARv	265184	262473	191844	96503	41479	62085	2551	2114	3805
Min ARv	47881	47154	40681	2368	388	1781	151	0	323
Max ARv	834444	822935	673433	296852	114149	180004	11252	6051	12863
Nt	173	173	173	173	173	173	173	173	173
ARt	48642	48058	33991	13855	6165	7414	213	244	339
SD ARt	45365	45004	35166	20063	9858	14950	527	607	946
Min ARt	216	216	0	0	0	0	0	0	0
Max ARt	159430	158892	119152	90858	47523	87460	4220	4699	8483

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size

Small (S)									
Nv	106	106	106	106	106	106	106	106	106
TR	11386954	10953103	6235116	3919880	864712	2981363	798107	223969	209883
ARv	107424	103331	58822	36980	8158	28126	7529	2113	1980
SD ARv	96668	93907	71667	51580	15737	46202	21523	2858	3011
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	360899	354424	330477	273496	88661	273096	195019	15885	15995
Nt	1583	1583	1583	1583	1583	1583	1583	1583	1583
ARt	7193	6919	3939	2476	546	1883	504	141	133
SD ARt	8179	8051	5831	4999	1876	4387	3800	392	423
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	131091	131091	59935	39424	16811	39424	130347	6246	5303

Medium (M)									
Nv	85	85	85	85	85	85	85	85	85
TR	20262528	19588261	7140149	11100037	1631947	9252620	1348075	203279	470988
ARv	238383	230450	84002	130589	19199	108854	15860	2392	5541
SD ARv	173407	169515	122507	95299	30868	89793	54222	3760	5078
Min ARv	5574	5501	0	0	0	0	0	0	0
Max ARv	834444	822935	673433	311352	113429	307429	463807	18165	32660
Nt	1059	1059	1059	1059	1059	1059	1059	1059	1059
ARt	19134	18497	6742	10482	1541	8737	1273	192	445
SD ARt	20448	20056	14152	11849	4562	10594	9031	518	1141
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	184091	157359	117114	79078	39796	70428	156818	5443	26732

Large (L)									
Nv	49	49	49	49	49	49	49	49	49
TR	16520377	16149900	7742589	8088358	1927866	6023280	318953	125726	244752
ARv	337151	329590	158012	165069	39344	122924	6509	2566	4995
SD ARv	204042	202088	166782	87709	45844	87715	16219	3010	4025
Min ARv	10985	10315	3037	0	0	0	0	0	0
Max ARv	810755	800056	573307	300327	148578	297431	92251	12434	13236
Nt	472	472	472	472	472	472	472	472	472
ARt	35001	34216	16404	17136	4084	12761	676	266	519
SD ARt	34158	33929	27830	17000	8661	13859	3263	647	878
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	183725	182969	128767	117027	48131	89074	50897	6868	8483

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Target

Swordfish (S)									
Nv	68	68	68	68	68	68	68	68	68
TR	14732417	14425395	10653042	3341438	1310499	1967922	430915	155600	151422
ARv	216653	212138	156662	49139	19272	28940	6337	2288	2227
SD ARv	221534	219209	164310	70345	31708	45503	12931	2573	3092
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	834444	822935	673433	275846	113429	213139	81737	8984	15995
Nt	1053	1053	1053	1053	1053	1053	1053	1053	1053
ARt	13991	13699	10117	3173	1245	1869	409	148	144
SD ARt	25841	25627	19936	9680	4580	6720	2701	420	455
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	183725	182969	128767	117027	47523	89074	72758	4699	5294

Mixed Swordfish and Tunas (M)									
Nv	120	120	120	120	120	120	120	120	120
TR	26325268	25456661	9499834	14764038	2965223	11457700	1192789	323586	545021
ARv	219377	212139	79165	123034	24710	95481	9940	2697	4542
SD ARv	158046	154475	93645	98786	35686	90937	21953	3766	4359
Min ARv	2129	1189	0	0	0	0	0	0	0
Max ARv	781934	776085	483190	311352	148578	307429	133139	18165	19183
Nt	1579	1579	1579	1579	1579	1579	1579	1579	1579
ARt	16672	16122	6016	9350	1878	7256	755	205	345
SD ARt	18946	18668	12226	12355	5226	10474	4426	541	776
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	159430	158892	124641	90858	48131	87460	83864	6868	10128

Tunas Only (T)									
Nv	52	52	52	52	52	52	52	52	52
TR	7112175	6809208	964978	5002799	148803	4831642	841431	73788	229180
ARv	136773	130946	18557	96208	2862	92916	16181	1419	4407
SD ARv	134924	129665	25749	87034	8035	86262	68734	2415	5275
Min ARv	2612	2053	361	0	0	0	0	0	0
Max ARv	778427	736509	125248	298981	49843	296989	463807	11049	32660
Nt	482	482	482	482	482	482	482	482	482
ARt	14756	14127	2002	10379	309	10024	1746	153	475
SD ARt	16228	15527	4397	10074	1694	9897	12516	409	1368
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	184091	157359	39805	64870	21739	64400	156818	3004	26732

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category

Small-Swordfish (A)									
Nv	39	39	39	39	39	39	39	39	39
TR	4433722	4285520	3396611	650058	227781	402084	238851	79493	68709
ARv	113685	109885	87093	16668	5841	10310	6124	2038	1762
SD ARv	106413	102976	83201	28979	12952	17079	10413	2568	3037
Min ARv	143	131	0	0	0	0	0	0	0
Max ARv	360899	354424	330477	119156	63218	65186	55319	8984	15995
Nt	723	723	723	723	723	723	723	723	723
ARt	6132	5927	4698	899	315	556	330	110	95
SD ARt	6980	6836	6308	2196	1149	1474	1556	288	369
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	61790	61424	59935	14309	9897	11946	28336	3496	3998

Small-Mixed (B)									
Nv	43	43	43	43	43	43	43	43	43
TR	5202297	5013118	2456404	2257041	586108	1621909	299673	101637	87543
ARv	120984	116584	57126	52489	13630	37719	6969	2364	2036
SD ARv	97589	95009	67887	63857	20028	58912	14282	3184	2847
Min ARv	2129	1189	189	0	0	0	0	0	0
Max ARv	355002	352791	329047	273496	88661	273096	76459	15885	12750
Nt	659	659	659	659	659	659	659	659	659
ARt	7894	7607	3727	3425	889	2461	455	154	133
SD ARt	8279	8134	5765	6132	2539	5280	1897	458	443
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	54460	54412	53004	39424	16811	39424	18430	6246	5303

Small-Tuna (C)									
Nv	24	24	24	24	24	24	24	24	24
TR	1750936	1654465	382101	1012781	50824	957370	259583	42839	53632
ARv	72956	68936	15921	42199	2118	39890	10816	1785	2235
SD ARv	70076	67968	17720	46201	4205	45507	39343	2763	3345
Min ARv	2612	2053	361	0	0	0	0	0	0
Max ARv	276394	272523	61078	180933	15926	180933	195019	11049	13465
Nt	201	201	201	201	201	201	201	201	201
ARt	8711	8231	1901	5039	253	4763	1291	213	267
SD ARt	10945	10933	3090	6165	1102	6072	9638	467	503
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	131091	131091	16347	26539	11482	26341	130347	2880	3822

Medium-Swordfish (D)									
Nv	17	17	17	17	17	17	17	17	17
TR	4912463	4825906	3713513	952925	394236	542534	159468	36878	49679
ARv	288968	283877	218442	56054	23190	31914	9380	2169	2922
SD ARv	251153	249599	197599	74335	34648	46279	20361	2090	3229
Min ARv	5574	5501	2940	0	0	0	0	0	0
Max ARv	834444	822935	673433	275846	113429	160401	81737	7842	9617
Nt	243	243	243	243	243	243	243	243	243
ARt	20216	19860	15282	3922	1622	2233	656	152	204
SD ARt	29981	29769	24102	9159	4791	6069	4913	441	538
Min ARt	111	71	0	0	0	0	0	0	0
Max ARt	153028	153028	117114	63578	32715	50298	72758	3358	5294

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category (continued)

Medium-Mixed (E)									
Nv	43	43	43	43	43	43	43	43	43
TR	10677338	10278370	2939426	6710839	1150055	5378119	628105	135759	263209
ARv	248310	239032	68359	156066	26745	125073	14607	3157	6121
SD ARv	137675	133371	67548	93241	34190	88694	28891	4744	4668
Min ARv	20483	20483	0	2368	0	1781	25	0	0
Max ARv	604961	577080	269825	311352	111439	307429	133139	18165	19183
Nt	574	574	574	574	574	574	574	574	574
ARt	18602	17907	5121	11691	2004	9370	1094	237	459
SD ARt	15521	15290	8352	12197	5096	10728	6406	589	897
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	91882	89820	66952	79078	39796	70428	83864	5443	10128

Medium-Tuna (F)									
Nv	25	25	25	25	25	25	25	25	25
TR	4672727	4483985	487210	3436273	87655	3331967	560502	30642	158100
ARv	186909	179359	19488	137451	3506	133279	22420	1226	6324
SD ARv	158978	151786	30605	87986	10908	87975	92063	2165	6249
Min ARv	8077	7923	386	7318	0	7318	41	0	41
Max ARv	778427	736509	125248	298981	49843	296989	463807	9258	32660
Nt	242	242	242	242	242	242	242	242	242
ARt	19309	18529	2013	14199	362	13768	2316	127	653
SD ARt	18928	17815	5275	10849	2162	10634	15320	383	1846
Min ARt	246	0	0	0	0	0	0	0	0
Max ARt	184091	157359	39805	64870	21739	64400	156818	3004	26732

Large-Swordfish (G)									
Nv	12	12	12	12	12	12	12	12	12
TR	5386232	5313969	3542918	1738455	688482	1023304	32596	39228	33034
ARv	448853	442831	295243	144871	57373	85275	2716	3269	2753
SD ARv	252124	249706	199314	73430	39385	61500	3473	3145	3065
Min ARv	15633	15372	3037	0	0	0	0	0	0
Max ARv	810755	800056	573307	256181	109638	213139	11252	8183	8768
Nt	87	87	87	87	87	87	87	87	87
ARt	61911	61080	40723	19982	7914	11762	375	451	380
SD ARt	47735	47558	40291	23214	11325	17794	868	900	702
Min ARt	1351	1351	0	0	0	0	0	0	0
Max ARt	183725	182969	128767	117027	47523	89074	5764	4699	3144

Large-Mixed (H)									
Nv	34	34	34	34	34	34	34	34	34
TR	10445633	10165173	4104004	5796157	1229060	4457672	265012	86190	194269
ARv	307224	298976	120706	170475	36149	131108	7794	2535	5714
SD ARv	179367	176953	131861	93331	47894	92708	19268	3025	4196
Min ARv	10985	10315	7382	854	0	446	0	0	149
Max ARv	781934	776085	483190	300327	148578	297431	92251	12434	13236
Nt	346	346	346	346	346	346	346	346	346
ARt	30190	29379	11861	16752	3552	12883	766	249	561
SD ARt	27828	27558	21422	15758	8049	13204	3772	595	942
Min ARt	0	0	0	0	0	0	0	0	0
Max ARt	159430	158892	124641	90858	48131	87460	50897	6868	8483

	ALL	PLGC	SWO	BAYS	BET	YFT	DOL	SHRK	OTHR

By Size-Target Category (continued)

Large-Tuna (I)									
Nv	3	3	3	3	3	3	3	3	3
TR	688512	670757	95667	553746	10324	542304	21345	307	17448
ARv	229504	223586	31889	184582	3441	180768	7115	102	5816
SD ARv	106135	104050	41166	87942	1703	85893	2578	140	2562
Min ARv	107360	103728	3875	92945	1475	91470	4647	0	3371
Max ARv	299249	290722	79153	268293	4425	262794	9790	261	8482
Nt	39	39	39	39	39	39	39	39	39
ARt	17654	17199	2453	14199	265	13905	547	8	447
SD ARt	9847	9626	4220	8906	512	8795	897	30	567
Min ARt	892	641	0	641	0	641	0	0	0
Max ARt	43929	42360	20334	35893	2552	35893	3830	154	2734

APPENDIX V: SUMMARY OF TRAVEL AND FISHING DAYS

The following tables summarize the travel and fishing days spent by vessels by trip, and annually; and are broken down by group: surveyed vs. non-surveyed, by region, by vessel size, by vessel target, and by size-target categories.

TRIPS = Number of identifiably pelagic longline trips taken by vessels in 1997.
TRIPLGTH = LAND_DATE – DEPR_DATE.
TRVLDAY = TRIPLGTH – SETS_S.
DF_CALC = LAST_SET_DATE – FIRST_SET_DATE.
SETS_T = Number of sets reported on trip summary form.
SETS_S = Number of sets for a trip from PLL database.

Number of Trips: number of trips in the group for the variable.
Min Days or Sets/Trip: least number of Days or Sets for a trip in the group.
Max Days or Sets/Trip: most number of Days or Sets for a trip in the group.
Total Days or Sets: sum of Days or Sets for the variable for the group.
Avg Days or Sets/Trip: Average number of Days or Sets per trip in the sample.
SD Avg Days or Sets/Trip: Standard deviation.
Number of Vessels: number of vessels in the group for the variable.
Avg/Yr/Vessel: Average annual number of Days or Sets per vessel for the group (except for "TRIPS" which indicates the average number of trips taken annually per vessel.
SD Avg/Yr/Vessel: Standard Deviation.

All Vessels All Trips

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S
Number of Trips		3114	3114	3114	3064	3114
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		75	56	34	158	25
Total Days or Sets		32805	17607	20290	15978	15198
Avg Days or Sets/Trip		11	6	7	5	5
SD Avg Days or Sets/Trip		8	6	5	5	4
Number of Vessels	240	240	240	240	240	240
Avg/Yr/Vessel	13	137	73	85	67	63
SD Avg/Yr/Vessel	10	80	51	51	44	42

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S

Surveyed Vessels

Number of Trips		1598	1598	1598	1581	1598
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		75	56	34	101	25
Total Days or Sets		16706	8160	10573	8698	8546
Avg Days or Sets/Trip		10	5	7	6	5
SD Avg Days or Sets/Trip		8	5	5	5	4
Number of Vessels	110	110	110	110	110	110
Avg/Yr/Vessel	13	135	74	83	65	62
SD Avg/Yr/Vessel	10	81	53	52	45	42

Non Surveyed Vessels

Number of Trips		1516	1516	1516	1483	1516
Min Days or Sets/Trip		1	0	1	0	1
Max Days or Sets/Trip		49	37	30	158	23
Total Days or Sets		16099	9447	9717	7280	6652
Avg Days or Sets/Trip		11	6	6	5	4
SD Avg Days or Sets/Trip		8	6	5	5	4
Number of Vessels	130	130	130	130	130	130
Avg/Yr/Vessel	13	138	73	86	68	65
SD Avg/Yr/Vessel	10	80	48	51	44	43

By Region

New England (NE)						
Number of Trips		48	48	48	48	48
Min Days or Sets/Trip		7	2	2	2	2
Max Days or Sets/Trip		75	56	31	24	24
Total Days or Sets		1381	814	756	594	567
Avg Days or Sets/Trip		29	17	16	12	12
SD Avg Days or Sets/Trip		14	11	7	5	6
Number of Vessels	8	8	8	8	8	8
Avg/Yr/Vessel	11	128	76	81	62	52
SD Avg/Yr/Vessel	8	90	61	57	44	45

Mid-Atlantic (MA)						
Number of Trips		357	357	357	355	357
Min Days or Sets/Trip		3	-1	1	0	1
Max Days or Sets/Trip		56	34	31	101	24
Total Days or Sets		4435	1878	2946	2644	2557
Avg Days or Sets/Trip		12	5	8	7	7
SD Avg Days or Sets/Trip		8	5	5	7	4
Number of Vessels	38	38	38	38	38	38
Avg/Yr/Vessel	13	136	71	82	67	66
SD Avg/Yr/Vessel	12	77	44	49	41	40

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S

By Region (continued)

South-Atlantic (SA)						
Number of Trips		1573	1573	1573	1556	1573
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		33	32	21	158	15
Total Days or Sets		10119	4508	6456	5741	5611
Avg Days or Sets/Trip		6	3	4	4	4
SD Avg Days or Sets/Trip		5	3	4	5	3
Number of Vessels	82	82	82	82	82	82
Avg/Yr/Vessel	13	132	67	83	67	65
SD Avg/Yr/Vessel	8	75	45	51	45	43

Gulf of Mexico (GOM)						
Number of Trips		963	963	963	935	963
Min Days or Sets/Trip		2	0	1	0	1
Max Days or Sets/Trip		45	37	27	16	15
Total Days or Sets		13212	8271	8111	5460	4941
Avg Days or Sets/Trip		14	9	8	6	5
SD Avg Days or Sets/Trip		5	5	4	3	3
Number of Vessels	93	93	93	93	93	93
Avg/Yr/Vessel	13	145	80	89	69	65
SD Avg/Yr/Vessel	10	85	55	52	47	44

Caribbean (CAR)						
Number of Trips		173	173	173	170	173
Min Days or Sets/Trip		2	0	1	0	1
Max Days or Sets/Trip		50	38	34	24	25
Total Days or Sets		3658	2136	2021	1539	1522
Avg Days or Sets/Trip		21	12	12	9	9
SD Avg Days or Sets/Trip		13	9	8	6	6
Number of Vessels	19	19	19	19	19	19
Avg/Yr/Vessel	11	121	72	75	51	50
SD Avg/Yr/Vessel	9	86	60	52	35	34

By Size Category

Small						
Number of Trips		1583	1583	1583	1568	1583
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		33	32	23	14	14
Total Days or Sets		10614	5041	6669	5631	5573
Avg Days or Sets/Trip		7	3	4	4	4
SD Avg Days or Sets/Trip		5	3	3	3	3
Number of Vessels	106	106	106	106	106	106
Avg Yr/Vessel	14	131	67	83	67	64
SD Avg Yr Vessel	9	75	46	51	43	42

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S

By Size Category (continued)

Medium						
Number of Trips		1059	1059	1059	1034	1059
Min Days or Sets/Trip		2	-1	1	0	1
Max Days or Sets/Trip		50	38	27	158	19
Total Days or Sets		13142	7391	8200	6261	5751
Avg Days or Sets/Trip		12	7	8	6	5
SD Avg Days or Sets/Trip		7	5	5	6	4
Number of Vessels	85	85	85	85	85	85
Avg/Yr/Vessel	13	147	80	90	70	67
SD Avg/Yr/Vessel	10	85	52	53	48	44

Large						
Number of Trips		472	472	472	462	472
Min Days or Sets/Trip		2	0	1	0	1
Max Days or Sets/Trip		75	56	34	101	25
Total Days or Sets		9049	5175	5421	4086	3874
Avg Days or Sets/Trip		19	11	11	9	8
SD Avg Days or Sets/Trip		10	8	6	6	5
Number of Vessels	49	49	49	49	49	49
Avg/Yr/Vessel	11	130	75	79	59	55
SD Avg/Yr/Vessel	8	83	58	49	39	38

By Target Category

Swordfish						
Number of Trips		1053	1053	1053	1038	1053
Min Days or Sets/Trip		1	-2	1	0	1
Max Days or Sets/Trip		75	56	34	24	25
Total Days or Sets		9529	4970	5615	4594	4559
Avg Days or Sets/Trip		9	5	5	4	4
SD Avg Days or Sets/Trip		9	6	5	4	4
Number of Vessels	68	68	68	68	68	68
Avg/Yr/Vessel	12	126	68	80	63	58
SD Avg/Yr/Vessel	9	78	49	51	44	42

Mixed						
Number of Trips		1579	1579	1579	1554	1579
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		49	35	32	158	24
Total Days or Sets		17531	9207	11128	8862	8324
Avg Days or Sets/Trip		11	6	7	6	5
SD Avg Days or Sets/Trip		7	5	5	6	4
Number of Vessels	120	120	120	120	120	120
Avg/Yr/Vessel	13	136	74	82	63	62
SD Avg/Yr/Vessel	10	81	52	50	41	40

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S

By Target Category (continued)

Tuna						
Number of Trips		482	482	482	472	482
Min Days or Sets/Trip		1	0	1	0	1
Max Days or Sets/Trip		45	37	27	13	13
Total Days or Sets		5745	3430	3547	2522	2315
Avg Days or Sets/Trip		12	7	7	5	5
SD Avg Days or Sets/Trip		6	5	4	3	3
Number of Vessels	52	52	52	52	52	52
Avg/Yr/Vessel	13	152	79	97	78	72
SD Avg/Yr/Vessel	9	82	49	54	51	46

By Size-Target Category

Small-Sword						
Number of Trips		723	723	723	713	723
Min Days or Sets/Trip		1	-2	1	0	1
Max Days or Sets/Trip		33	32	16	13	13
Total Days or Sets		4145	1863	2594	2250	2282
Avg Days or Sets/Trip		6	3	4	3	3
SD Avg Days or Sets/Trip		4	3	3	3	3
Number of Vessels	39	39	39	39	39	39
Avg/Yr/Vessel	14	128	64	80	69	64
SD Avg/Yr/Vessel	10	75	40	49	48	46

Small-Mixed						
Number of Trips		659	659	659	659	659
Min Days or Sets/Trip		1	-6	1	0	1
Max Days or Sets/Trip		33	32	23	14	14
Total Days or Sets		4779	2245	3101	2624	2534
Avg Days or Sets/Trip		7	3	5	4	4
SD Avg Days or Sets/Trip		5	3	4	3	3
Number of Vessels	43	43	43	43	43	43
Avg/Yr/Vessel	14	129	68	79	61	60
SD Avg/Yr/Vessel	10	74	51	49	37	38

Small-Tuna						
Number of Trips		201	201	201	196	201
Min Days or Sets/Trip		1	0	1	0	1
Max Days or Sets/Trip		24	17	18	10	10
Total Days or Sets		1690	933	974	757	757
Avg Days or Sets/Trip		8	5	5	4	4
SD Avg Days or Sets/Trip		5	4	4	2	2
Number of Vessels	24	24	24	24	24	24
Avg Yr Vessel	12	141	70	96	76	72
SD Avg/Yr/Vessel	6	80	48	56	44	45

By Size-Target Category (continued)

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S
Medium-Sword						
Number of Trips		243	243	243	240	243
Min Days or Sets/Trip		2	0	1	0	1
Max Days or Sets/Trip		50	38	26	20	19
Total Days or Sets		2979	1623	1742	1392	1356
Avg Days or Sets/Trip		12	7	7	6	6
SD Avg Days or Sets/Trip		10	7	6	4	4
Number of Vessels	17	17	17	17	17	17
Avg/Yr/Vessel	12	133	77	84	58	55
SD Avg/Yr/Vessel	6	76	57	50	34	34
Medium-Mixed						
Number of Trips		574	574	574	557	574
Min Days or Sets/Trip		2	-1	1	0	1
Max Days or Sets/Trip		28	27	19	158	16
Total Days or Sets		6657	3589	4225	3337	3068
Avg Days or Sets/Trip		12	6	7	6	5
SD Avg Days or Sets/Trip		5	4	4	7	4
Number of Vessels	43	43	43	43	43	43
Avg/Yr/Vessel	13	145	78	86	67	67
SD Avg/Yr/Vessel	12	91	53	55	46	45
Medium-Tuna						
Number of Trips		242	242	242	237	242
Min Days or Sets/Trip		2	1	1	0	1
Max Days or Sets/Trip		45	37	27	12	12
Total Days or Sets		3506	2179	2233	1532	1327
Avg Days or Sets/Trip		14	9	9	6	5
SD Avg Days or Sets/Trip		5	5	4	3	3
Number of Vessels	25	25	25	25	25	25
Avg/Yr/Vessel	14	161	85	100	84	76
SD Avg/Yr/Vessel	11	81	46	51	58	48
Large-Sword						
Number of Trips		87	87	87	85	87
Min Days or Sets/Trip		2	0	1	1	1
Max Days or Sets/Trip		75	56	34	24	25
Total Days or Sets		2405	1484	1279	952	921
Avg Days or Sets/Trip		28	17	15	11	11
SD Avg Days or Sets/Trip		14	9	8	6	6
Number of Vessels	12	12	12	12	12	12
Avg/Yr/Vessel	8	107	64	71	50	43
SD Avg/Yr/Vessel	5	93	62	61	44	41

	TRIPS	TRIPLGTH	TRVLDAY	DF_CALC	SETS_T	SETS_S

By Size-Target Category (continued)

Large-Mixed						
Number of Trips		346	346	346	338	346
Min Days or Sets/Trip		2	1	1	0	1
Max Days or Sets/Trip		49	35	32	101	24
Total Days or Sets		6095	3373	3802	2901	2722
Avg Days or Sets/Trip		18	10	11	9	8
SD Avg Days or Sets/Trip		9	7	6	7	4
Number of Vessels	34	34	34	34	34	34
Avg/Yr/Vessel	12	136	76	81	62	59
SD Avg/Yr/Vessel	9	76	54	44	38	38

Large-Tuna						
Number of Trips		39	39	39	39	39
Min Days or Sets/Trip		6	2	1	1	1
Max Days or Sets/Trip		25	18	19	13	13
Total Days or Sets		549	318	340	233	231
Avg Days or Sets/Trip		14	8	9	6	6
SD Avg Days or Sets/Trip		4	4	5	3	3
Number of Vessels	3	3	3	3	3	3
Avg/Yr/Vessel	11	159	108	86	52	50
SD Avg/Yr/Vessel	6	126	89	74	39	38

APPENDIX VI: DETAILED COST EARNINGS INFORMATION

Table VI.1: Average 1997 Annual Cost and Earnings, All Pelagic Longlining Vessels

Sample size: 102 vessels, *92 w/ market value of vessel			
	Mean	**Standard Deviation**	
Total Number of Trips:	14.40	9.71	
Number of Crew:	3.82	0.87	
Maximum Mainline Carried (Miles)	33.53	11.27	
Summary of Cost and Earnings			
	Average per vessel	**Standard Deviation**	**Share of Total Costs**
Gross Receipts	246790	189284	
Variable Expenses	188940	136694	0.79
Trip expenses excluding labor and selling	95757	60667	0.40
Labor costs	77958	78618	0.33
Sales expenses	15225	21372	0.06
Net Operating Returns	57850	63034	
Fixed Costs	48780	36783	0.21
Return to owner	9070	53330	
Earnings from other fishing activity	4679	10534	
All vessel earnings (Return to owner +Earnings from other fishing activity)	13750	55480	
Depreciation*	17225	11936	
All vessel earnings after depreciation*	-3475	55698	
Estimated Market of Vessel*	202641	140428	
Variable Costs:	188940	136694	0.79
Total Trip Costs (excluding labor):	110982	73811	0.47
Fuel:	21974	19665	0.09
Ice:	3725	2446	0.02
Bait:	18299	11492	0.08
Lightsticks:	8521	7342	0.04
Food:	10211	6324	0.04
Gear:	28111	16820	0.12
Other Trip Costs:	4917	3732	0.02
Selling Fees:	15225	21372	0.06
Labor costs	77958	78618	0.33
Fixed Costs:	48780	36783	0.21
Maintenance:	13998	12370	0.06
Dry-dock:	5054	6191	0.02

Moorage:	1599	2248	0.01
Insurance:	13265	10924	0.06
Bookkeeping:	1506	1899	0.01
Loan Payments:	9637	15338	0.04
Miscellaneous:	3627	7155	0.02
Depreciation Charge:*	17225	11936	0.07
Fixed Costs :*	67850	44875	0.29
Total Costs (without depreciation)*	237720	164358	

*** Values are based on a different sample size than other entries.**

Table VI.1a: Average 1997 Trip Receipts, Costs and Net Operating Revenue

All Pelagic Longlining Survey Vessels

Sample size: 102 vessels, *92 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	13.09	8.90	
Travel days	6.71	5.95	
Average Sets per trip	6.37	3.56	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	22364	23738	
Variable Expenses	16807	16967	
Trip expenses excluding labor and selling	8340	7603	0.50
Labor costs	7173	8789	0.43
Sales expenses	1294	2251	0.08
Net Operating Returns	5556	7413	
Variable Costs:	16807	16967	
Fuel:	2071	2495	0.12
Ice:	297	202	0.02
Bait:	1559	1312	0.09
Lightsticks:	738	959	0.04
Food:	897	791	0.05
Gear:	2336	1845	0.14
Other Trip Costs:	442	470	0.03
Total Trip Costs (excluding wages):	9634	9130	0.57
Labor costs	7173	8789	0.43

Table VI.2: Average 1997 Annual Cost and Earnings, Pelagic Longlining Vessels

Landing Fish Principally in the New England Region

Sample size: 4 vessels, *4 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	7.25	1.50	
Number of Crew:	5.00	0.00	
Maximum Mainline Carried (Miles)	48.00	10.46	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	569626	106264	
Variable Expenses	429848	85505	0.76
Trip expenses excluding labor and selling	203351	11485	0.36
Labor costs	181634	61404	0.32
Sales expenses	44863	46016	0.08
Net Operating Returns	139777	50994	
Fixed Costs	132666	35424	0.24
Return to owner	7111	68812	
Earnings from other fishing activity	8367	16733	
All vessel owner earnings (Return to owner + Earnings from other fishing activity)	15478	77505	
Depreciation*	44625	22355	
Return to owner after depreciation*	-37514	61248	
Estimated Market of Vessel*	525000	262996	
Variable Costs:	429848	85505	0.76
Total Trip Costs (excluding labor):	248214	50254	0.44
Fuel:	66181	10523	0.12
Ice:	3151	3345	0.01
Bait:	32940	4754	0.06
Lightsticks:	20431	10628	0.04
Food:	20641	1208	0.04
Gear:	48230	4023	0.09
Other Trip Costs:	11778	855	0.02
Selling Fees:	44863	46016	0.08
Labor costs	181634	61404	0.32
Fixed Costs:	132666	35424	0.24
Maintenance:	39957	13803	0.07
Dry-dock:	11165	10728	0.02

Moorage:	2945	2058	0.01
Insurance:	39599	7809	0.07
Bookkeeping:	3100	3580	0.01
Loan Payments:	22573	20222	0.04
Miscellaneous:	13327	12400	0.02
Depreciation Charge:*	44625	22355	0.08
Fixed Costs :*	177291	45394	0.32
Total Costs (without depreciation included)	562514	50320	

*** Values are based on a different sample size than other entries.**

Table VI.2a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Survey Vessels Landing Fish Principally in the New England Region

Sample size: 4 vessels, *4 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	36.08	7.80	
Travel days	21.45	5.75	
Average Sets per trip	14.62	2.66	
	Average per vessel	Standard Deviation	Share of Total Variable Costs
Gross Receipts	81569	22711	
Variable Expenses	60797	13690	
Trip expenses excluding labor and selling	28925	5984	0.48
Labor costs	26071	10336	0.43
Sales expenses	5800	5702	0.10
Net Operating Returns	20772	10673	
Variable Costs:	60797	13690	
Fuel:	9209	784	0.15
Ice:	378	389	0.01
Bait:	4779	1579	0.08
Lightsticks:	3129	2087	0.05
Food:	2943	655	0.05
Gear:	6800	1040	0.11
Other Trip Costs:	1687	422	0.03
Total Trip Costs (excluding wages):	34725	6560	0.57
Labor costs	26071	10336	0.43

Table VI.3: Average 1997 Annual Cost and Earnings, Pelagic Longlining Vessels

Landing Fish Principally in the Mid- Atlantic Region

Sample size: 25 vessels, *25 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	9.64	5.77	
Number of Crew:	3.80	0.65	
Maximum Mainline Carried (Miles)	31.52	9.71	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	189967	130700	
Variable Expenses	148093	105591	0.76
Trip expenses excluding labor and selling	77901	61182	0.40
Labor costs	62204	51465	0.32
Sales expenses	7987	7472	0.04
Net Operating Returns	41874	40728	
Fixed Costs	45737	30423	0.24
Return to owner	-3863	51480	
Earnings from other fishing activity	9825	14244	
All vessel owner earnings (Return to owner + Earnings from other fishing activity)	5961	58649	
Depreciation*	17264	9545	
Return to owner after depreciation*	-11303	52433	
Estimated Market of Vessel*	203100	112290	
Variable Costs:	148093	105591	0.76
Total Trip Costs (excluding labor):	85889	64447	0.44
Fuel:	21350	22026	0.11
Ice:	2484	1747	0.01
Bait:	14715	10571	0.08
Lightsticks:	5982	5735	0.03
Food:	7963	6082	0.04
Gear:	21382	15539	0.11
Other Trip Costs:	4026	3464	0.02
Selling Fees:	7987	7472	0.04
Labor costs	62204	51465	0.32
Fixed Costs:	45737	30423	0.24
Maintenance:	10617	10416	0.05

Dry-dock:	4384	4830	0.02
Moorage:	443	1262	0.00
Insurance:	13816	7033	0.07
Bookkeeping:	1097	1448	0.01
Loan Payments:	12938	18381	0.07
Miscellaneous:	2346	2773	0.01
Depreciation Charge:*	17264	9545	0.09
Fixed Costs :*	63001	35276	0.33
Total Costs (without depreciation)	193830	123859	

*** Values are based on a different sample size than other entries.**

Table VI.3a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Survey Vessels Landing Fish Principally in the Mid-Atlantic Region

Sample size: 25 vessels, *25 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	12.16	7.15	
Travel days	5.22	4.71	
Average Sets per trip	6.94	3.34	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	20151	13091	
Variable Expenses	15397	10359	
Trip expenses excluding labor and selling	7907	6418	0.51
Labor costs	6558	4939	0.43
Sales expenses	932	969	0.06
Net Operating Returns	4753	4609	
Variable Costs:	15397	10359	
Fuel:	2154	2283	0.14
Ice:	252	126	0.02
Bait:	1488	1049	0.10
Lightsticks:	635	827	0.04
Food:	817	645	0.05
Gear:	2147	1457	0.14
Other Trip Costs:	414	384	0.03
Total Trip Costs (excluding wages):	8839	6918	0.57
Labor costs	6558	4939	0.43

Table VI.4: Average 1997 Annual Cost and Earnings, Pelagic Longlining Vessels

Landing Fish Principally in the South Atlantic

Sample size: 39 vessels, *34 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	8.78	4.29	
Number of Crew:	4.89	0.60	
Maximum Mainline Carried (Miles)	50.78	13.15	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	220122	161658	
Variable Expenses	173293	112878	0.80
Trip expenses excluding labor and selling	88045	49007	0.41
Labor costs	68095	83180	0.32
Sales expenses	17153	20067	0.08
Net Operating Returns	46829	64001	
Fixed Costs	42245	22294	0.20
Return to owner	4584	59289	
Earnings from other fishing activity	1683	4412	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	6267	60111	
Depreciation*	13027	5824	
Return to owner after depreciation*	6760	62974	
Estimated Market of Vessel*	153258	68512	
Variable Costs:	173293	112878	0.80
Total Trip Costs (excluding labor):	105198	59553	0.49
Fuel:	14903	10086	0.07
Ice:	3983	2472	0.02
Bait:	17692	10130	0.08
Lightsticks:	8446	5196	0.04
Food:	9191	5389	0.04
Gear:	29564	16534	0.14
Other Trip Costs:	4266	2962	0.02
Selling Fees:	17153	20067	0.08
Labor costs	68095	83180	0.32
Fixed Costs:	42245	22294	0.20
Maintenance:	12608	10434	0.06
Dry-dock:	5301	6750	0.02

Moorage:	1937	2712	0.01
Insurance:	10792	7313	0.05
Bookkeeping:	1424	1813	0.01
Loan Payments:	8369	11408	0.04
Miscellaneous:	1770	2250	0.01
Depreciation Charge:*	13027	5824	0.06
Fixed Costs :*	58402	25307	0.27
Total Costs (without depreciation)	215538	128141	

*** Values are based on a different sample size than other entries.**

Table VI.4a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Survey Vessels Landing Fish Principally in the South Atlantic Region

Sample size: 39 vessels, *34 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	7.61	3.03	
Travel days	3.22	1.31	
Average Sets per trip	4.40	2.08	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	11242	10160	
Variable Expenses	8677	6684	
Trip expenses excluding labor and selling	4207	2000	0.48
Labor costs	3670	5236	0.42
Sales expenses	801	953	0.09
Net Operating Returns	2565	3907	
Variable Costs:	8677	6684	
Fuel:	717	452	0.08
Ice:	191	83	0.02
Bait:	882	495	0.10
Lightsticks:	392	192	0.05
Food:	438	217	0.05
Gear:	1381	612	0.16
Other Trip Costs:	206	111	0.02
Total Trip Costs (excluding wages):	5007	2540	0.58
Labor costs	3670	5236	0.42

Table VI.5: Average 1997 Annual Cost and Earnings, Pelagic Longlining Vessels Landing Fish Principally in the Gulf of Mexico Region

Sample size: 25 vessels, *21 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	11.92	4.30
Number of Crew:	4.16	0.94
Maximum Mainline Carried (Miles)	34.24	9.88

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	195023	111688	
Variable Expenses	147950	84798	0.83
Trip expenses excluding labor and selling	84646	50407	0.48
Labor costs	56750	37325	0.32
Sales expenses	6554	11835	0.04
Net Operating Returns	47073	33430	
Fixed Costs	29555	20007	0.17
Return to owner	17518	38326	
Earnings from other fishing activity	3054	6187	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	20571	38293	
Depreciation*	13457	9226	
Return to owner after depreciation*	7114	43981	
Estimated Market of Vessel*	158318	108544	
Variable Costs:	147950	84798	0.83
Total Trip Costs (excluding labor):	91200	55413	0.51
Fuel:	19846	18047	0.11
Ice:	4991	2529	0.03
Bait:	16427	11364	0.09
Lightsticks:	6141	5876	0.03
Food:	9764	4973	0.06
Gear:	23551	13002	0.13
Other Trip Costs:	3925	2744	0.02
Selling Fees:	6554	11835	0.04
Labor costs	56750	37325	0.32
Fixed Costs:	29555	20007	0.17
Maintenance:	12719	10534	0.07
Dry-dock:	3516	3655	0.02

Moorage:	1393	1706	0.01
Insurance:	6188	6136	0.03
Bookkeeping:	1338	1580	0.01
Loan Payments:	2723	6977	0.02
Miscellaneous:	1523	1978	0.01
Depreciation Charge:*	13457	9226	0.08
Fixed Costs :*	44268	26875	0.25
Total Costs (without depreciation included)	177505	91954	

*** Values are based on a different sample size than other entries.**

Table VI.5a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Survey Vessels Landing Fish Principally in the Gulf of Mexico Region

Sample size: 25 vessels, *21 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	13.71	3.46	
Travel days	7.52	2.84	
Average Sets per trip	6.19	2.08	
	Average per vessel	Standard Deviation	Share of Total Variable Costs
Gross Receipts	16437	6782	
Variable Expenses	12594	5227	
Trip expenses excluding labor and selling	7358	3112	0.58
Labor costs	4727	2750	0.38
Sales expenses	510	908	0.04
Net Operating Returns	3843	2290	
Variable Costs:	12594	5227	
Fuel:	1703	1221	0.14
Ice:	469	218	0.04
Bait:	1406	719	0.11
Lightsticks:	490	417	0.04
Food:	881	339	0.07
Gear:	2067	805	0.16
Other Trip Costs:	342	190	0.03
Total Trip Costs (excluding wages):	7867	3528	0.62
Labor costs	4727	2750	0.38

Table VI.6: Average 1997 Annual Cost and Earnings, Pelagic Longlining Vessels Landing Fish Principally in the Caribbean Sea Region

Sample size: 9 vessels, *8 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	8.78	4.29
Number of Crew:	4.89	0.60
Maximum Mainline Carried (Miles)	50.78	13.15

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	523298	276948	
Variable Expenses	379811	190968	0.79
Trip expenses excluding labor and selling	162201	60863	0.34
Labor costs	178546	113416	0.37
Sales expenses	39063	31635	0.08
Net Operating Returns	143487	91741	
Fixed Costs	103080	44906	0.21
Return to owner	40407	58096	
Earnings from other fishing activity	6098	18293	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	46505	56383	
Depreciation*	31078	11801	
Return to owner after depreciation*	15427	62130	
Estimated Market of Vessel*	365625	138833	
Variable Costs:	379811	190968	0.79
Total Trip Costs (excluding labor):	201264	85979	0.42
Fuel:	40062	17267	0.08
Ice:	2677	1475	0.01
Bait:	29713	11765	0.06
Lightsticks:	17476	10343	0.04
Food:	17414	6901	0.04
Gear:	44897	17611	0.09
Other Trip Costs:	9963	3949	0.02
Selling Fees:	39063	31635	0.08
Labor costs	178546	113416	0.37
Fixed Costs:	103080	44906	0.21
Maintenance:	21414	15345	0.04
Dry-dock:	7600	9105	0.02
Moorage:	3376	2238	0.01

Insurance:	30916	8959	0.06
Bookkeeping:	2767	2780	0.01
Loan Payments:	20044	25425	0.04
Miscellaneous:	16799	15868	0.03
Depreciation Charge:*	31078	11801	0.06
Fixed Costs :*	132109	46031	0.27
Total Costs (without depreciation)	482891	226271	

*** Values are based on a different sample size than other entries.**

Table VI.6a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Survey Vessels Landing Fish Principally in the Caribbean Sea Region

Sample size: 9 vessels, *8 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	27.83	8.98	
Travel days	17.25	5.78	
Average Sets per trip	10.58	3.57	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	67440	31438	
Variable Expenses	48500	21341	
Trip expenses excluding labor and selling	21279	7435	0.44
Labor costs	22620	13414	0.47
Sales expenses	4602	4030	0.09
Net Operating Returns	18940	11169	
Variable Costs:	48500	21341	
Fuel:	5601	2872	0.12
Ice:	372	269	0.01
Bait:	3771	1273	0.08
Lightsticks:	2164	1116	0.04
Food:	2270	789	0.05
Gear:	5808	2019	0.12
Other Trip Costs:	1293	447	0.03
Total Trip Costs (excluding wages):	25880	9686	0.53
Labor costs	22620	13414	0.47

Table VI.7: Average 1997 Annual Cost and Earnings, Small Vessels (Pelagic Longlining Vessels, GRT ≤ 50)

Sample size: 44 vessels, *39 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	15.95	11.26	
Number of Crew:	3.23	0.68	
Maximum Mainline Carried (Miles)	26.09	6.82	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	137321	102678	
Variable Expenses	105406	82072	0.79
Trip expenses excluding labor and selling	55397	40973	0.42
Labor costs	40429	37264	0.30
Sales expenses	9580	16680	0.07
Net Operating Returns	31915	31881	
Fixed Costs	27738	16290	0.21
Return to owner	4178	32634	
Earnings from other fishing activity	4357	7629	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	8535	35244	
Depreciation*	10167	4958	
Return to owner after depreciation*	-1632	36861	
Estimated Market of Vessel*	119615	58334	
Variable Costs:	105406	82072	0.79
Total Trip Costs (excluding labor):	64977	50870	0.49
Fuel:	7574	5245	0.06
Ice:	3701	2705	0.03
Bait:	11017	8581	0.08
Lightsticks:	5506	4779	0.04
Food:	5544	3853	0.04
Gear:	19269	15599	0.14
Other Trip Costs:	2785	2001	0.02
Selling Fees:	9580	16680	0.07
Labor costs	40429	37264	0.30
Fixed Costs:	27738	16290	0.21

Maintenance:	7811	6772	0.06
Dry-dock:	2791	5629	0.02
Moorage:	1558	2104	0.01
Insurance:	7386	5660	0.06
Bookkeeping:	1156	1534	0.01
Loan Payments:	5759	9473	0.04
Miscellaneous:	1209	2750	0.01
Depreciation Charge:*	10167	4958	0.08
Fixed Costs :*	38797	19264	0.29
Total Costs (without depreciation included)	133144	88757	

*** Values are based on a different sample size than other entries.**

Table VI.7a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Small Vessels (Pelagic Longlining Vessels, GRT ≤ 50)

Sample size: 44 vessels, *39 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	7.32	3.20	
Travel days	3.40	2.00	
Average Sets per trip	3.92	2.04	
	Average per vessel	Standard Deviation	Share of Total Variable Costs
Gross Receipts	8739	5341	
Variable Expenses	6609	3875	
Trip expenses excluding labor and selling	3410	1658	0.52
Labor costs	2693	2349	0.41
Sales expenses	506	789	0.08
Net Operating Returns	2130	2060	
Variable Costs:	6609	3875	
Fuel:	483	231	0.07
Ice:	232	107	0.04
Bait:	708	451	0.11
Lightsticks:	318	212	0.05
Food:	349	154	0.05
Gear:	1136	553	0.17
Other Trip Costs:	183	103	0.03
Total Trip Costs (excluding wages):	3916	2053	0.59
Labor costs	2693	2349	0.41

Table VI.8: Average 1997 Annual Cost and Earnings, Medium Vessels

(Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 38 vessels, *37 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	14.89	9.31	
Number of Crew:	4.03	0.59	
Maximum Mainline Carried (Miles)	37.55	9.65	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	298687	201457	
Variable Expenses	225552	135499	0.80
Trip expenses excluding labor and selling	106072	49874	0.38
Labor costs	99774	95570	0.35
Sales expenses	19707	21182	0.07
Net Operating Returns	73134	75429	
Fixed Costs	56963	34892	0.20
Return to owner	16171	63305	
Earnings from other fishing activity	4841	11654	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	21012	63801	
Depreciation*	18397	7862	
Return to owner after depreciation*	-1701	63951	
Estimated Market of Vessel*	216432	92492	
Variable Costs:	225552	135499	0.80
Total Trip Costs (excluding labor):	125779	65830	0.45
Fuel:	21629	9680	0.08
Ice:	3633	1929	0.01
Bait:	21753	10058	0.08
Lightsticks:	8643	6248	0.03
Food:	12169	5354	0.04
Gear:	33009	15702	0.12
Other Trip Costs:	5237	3702	0.02
Selling Fees:	19707	21182	0.07
Labor costs	99774	95570	0.35
Fixed Costs:	56963	34892	0.20
Maintenance:	16361	11473	0.06

Dry-dock:	7085	6175	0.03
Moorage:	1814	2537	0.01
Insurance:	15108	9182	0.05
Bookkeeping:	1580	1623	0.01
Loan Payments:	9863	15334	0.03
Miscellaneous:	4992	9196	0.02
Depreciation Charge:*	18397	7862	0.07
Fixed Costs :*	76612	38129	0.27
Total Costs (without depreciation)	282516	162322	

*** Values are based on a different sample size than other entries.**

Table VI.8a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Medium Vessels (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 38 vessels, *37 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	14.01	6.57	
Travel days	6.90	4.69	
Average Sets per trip	7.11	2.55	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	25076	21512	
Variable Expenses	18483	14742	
Trip expenses excluding labor and selling	8392	5094	0.45
Labor costs	8457	8808	0.46
Sales expenses	1635	2156	0.09
Net Operating Returns	6593	7144	
Variable Costs:	18483	14742	
Fuel:	1713	989	0.09
Ice:	323	229	0.02
Bait:	1694	969	0.09
Lightsticks:	656	609	0.04
Food:	984	577	0.05
Gear:	2608	1599	0.14
Other Trip Costs:	413	369	0.02
Total Trip Costs (excluding wages):	10027	6995	0.54
Labor costs	8457	8808	0.46

Table VI.9: Average 1997 Annual Cost and Income, Large Vessels
(Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 20 vessels, *16 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	10.05	4.43
Number of Crew:	4.75	0.72
Maximum Mainline Carried (Miles)	42.25	12.14

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	389018	182020	
Variable Expenses	303149	125531	0.79
Trip expenses excluding labor and selling	164953	43548	0.43
Labor costs	119070	77036	0.31
Sales expenses	19126	28192	0.05
Net Operating Returns	85869	69930	
Fixed Costs	79525	45460	0.21
Return to owner	6344	68847	
Income from other fishing activity	5082	13900	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	11425	73824	
Depreciation*	31716	17230	
Return to owner after depreciation*	-20291	67498	
Estimated Market of Vessel*	373125	202706	
Variable Costs:	303149	125531	0.79
Total Trip Costs (excluding labor):	184079	60843	0.48
Fuel:	54308	15163	0.14
Ice:	3951	2813	0.01
Bait:	27754	9881	0.07
Lightsticks:	14924	9725	0.04
Food:	16757	4467	0.04
Gear:	38257	11650	0.10
Other Trip Costs:	9002	3162	0.02
Selling Fees:	19126	28192	0.05
Labor costs	119070	77036	0.31
Fixed Costs:	79525	45460	0.21
Maintenance:	23119	16305	0.06

Dry-dock:	6175	6028	0.02
Moorage:	1279	2025	0.00
Insurance:	22697	14737	0.06
Bookkeeping:	2135	2829	0.01
Loan Payments:	17740	22033	0.05
Miscellaneous:	6355	8076	0.02
Depreciation Charge:*	31716	17230	0.08
Fixed Costs :*	118403	51745	0.31
Total Costs (without depreciation)	382674	151665	

*** Values are based on a different sample size than other entries.**

Table VI.9a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Large Vessels (Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 20 vessels, *16 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	24.02	10.46	
Travel days	13.64	7.76	
Average Sets per trip	10.37	3.64	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	47184	30606	
Variable Expenses	36059	20893	
Trip expenses excluding labor and selling	19091	8521	0.53
Labor costs	14591	11807	0.40
Sales expenses	2377	3686	0.07
Net Operating Returns	11125	11006	
Variable Costs:	36059	20893	
Fuel:	6244	2576	0.17
Ice:	391	262	0.01
Bait:	3173	1552	0.09
Lightsticks:	1815	1555	0.05
Food:	1939	875	0.05
Gear:	4462	2045	0.12
Other Trip Costs:	1067	561	0.03
Total Trip Costs (excluding wages):	21468	10717	0.60
Labor costs	14591	11807	0.40

Table VI.10: Average 1997 Annual Cost and Earnings of Surveyed Vessels Targeting Swordfish

Sample size: 31 vessels, *28 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	18.87	13.39	
Number of Crew:	3.74	0.96	
Maximum Mainline Carried (Miles)	33.81	12.68	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	300693	230135	
Variable Expenses	233099	163140	0.80
Trip expenses excluding labor and selling	124888	66822	0.43
Labor costs	84953	91705	0.29
Sales expenses	23258	25963	0.08
Net Operating Returns	67594	79620	
Fixed Costs	59133	45797	0.20
Return to owner	8461	55153	
Earnings from other fishing activity	3489	10798	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	11950	57138	
Depreciation*	21174	15527	
Return to owner after depreciation*	-9224	57057	
Estimated Market of Vessel*	249107	182676	
Variable Costs:	233099	163140	0.80
Total Trip Costs (excluding labor):	148146	84018	0.51
Fuel:	24874	19233	0.09
Ice:	3750	2990	0.01
Bait:	22101	13151	0.08
Lightsticks:	14524	8920	0.05
Food:	13251	7409	0.05
Gear:	39469	17643	0.14
Other Trip Costs:	6919	4685	0.02
Selling Fees:	23258	25963	0.08
Labor costs	84953	91705	0.29
Fixed Costs:	59133	45797	0.20
Maintenance:	15502	11099	0.05

Dry-dock:	6049	8301	0.02
Moorage:	2333	2024	0.01
Insurance:	15625	13343	0.05
Bookkeeping:	2185	2302	0.01
Loan Payments:	11503	17855	0.04
Miscellaneous:	5852	10547	0.02
Depreciation Charge:*	21174	15527	0.07
Fixed Costs :*	84091	58156	0.29
Total Costs (without depreciation included)	292232	202475	

*** Values are based on a different sample size than other entries.**

Table VI.10a: Average 1997 Trip Receipts, Costs and Net Operating Revenue for Surveyed Vessels Targeting Swordfish

Sample size: 31vessels, *28 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	15.22	12.95	
Travel days	8.40	8.61	
Average Sets per trip	6.82	4.59	
	Average per vessel	Standard Deviation	Share of Total Variable Costs
Gross Receipts	28307	33600	
Variable Expenses	21380	24068	
Trip expenses excluding labor and selling	10798	10702	0.51
Labor costs	8552	12031	0.40
Sales expenses	2030	2913	0.09
Net Operating Returns	6927	10144	
Variable Costs:	21380	24068	
Fuel:	2432	3027	0.11
Ice:	206	130	0.01
Bait:	1954	2003	0.09
Lightsticks:	1327	1505	0.06
Food:	1149	1138	0.05
Gear:	3100	2521	0.14
Other Trip Costs:	632	682	0.03
Total Trip Costs (excluding wages):	12828	12908	0.60
Labor costs	8552	12031	0.40

Table VI.11: Average 1997 Annual Cost and Earnings of Surveyed Vessels Targeting A Species Mix

Sample size: 50 vessels, *45 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	13.60	7.33	
Number of Crew:	3.92	0.88	
Maximum Mainline Carried (Miles)	33.70	11.01	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	249360	156082	
Variable Expenses	194199	114583	0.79
Trip expenses excluding labor and selling	97145	51825	0.40
Labor costs	81054	63796	0.33
Sales expenses	16000	19975	0.07
Net Operating Returns	55162	51967	
Fixed Costs	51513	33001	0.21
Return to owner	3649	52102	
Earnings from other fishing activity	4404	10796	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	8053	55480	
Depreciation*	16335	9939	
Return to owner after depreciation*	-8282	53990	
Estimated Market of Vessel*	192178	116927	
Variable Costs:	194199	114583	0.79
Total Trip Costs (excluding labor):	113145	61303	0.46
Fuel:	24960	21543	0.10
Ice:	3267	1575	0.01
Bait:	19347	8409	0.08
Lightsticks:	7273	3116	0.03
Food:	9767	5258	0.04
Gear:	27616	13196	0.11
Other Trip Costs:	4914	2905	0.02
Selling Fees:	16000	19975	0.07
Labor costs	81054	63796	0.33
Fixed Costs:	51513	33001	0.21
Maintenance:	14508	14021	0.06
Dry-dock:	5489	5656	0.02
Moorage:	1401	2576	0.01

Insurance:	14303	10137	0.06
Bookkeeping:	1371	1794	0.01
Loan Payments:	11024	15604	0.04
Miscellaneous:	3346	5475	0.01
Depreciation Charge:*	16335	9939	0.07
Fixed Costs :*	68514	37112	0.28
Total Costs (without depreciation)	245711	134410	

*** Values are based on a different sample size than other entries.**

Table VI.11a: Average 1997 Trip Receipts, Costs and Net Operating Revenue for Surveyed Vessels Targeting A Species Mix

Sample size: 50 vessels, *45 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	12.39	6.67	
Travel days	5.80	4.36	
Average Sets per trip	6.59	3.20	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	21870	19373	
Variable Expenses	16649	13673	
Trip expenses excluding labor and selling	8253	6004	0.50
Labor costs	7092	7359	0.43
Sales expenses	1305	2073	0.08
Net Operating Returns	5221	6471	
Variable Costs:	16649	13673	
Fuel:	2278	2537	0.14
Ice:	273	166	0.02
Bait:	1563	747	0.09
Lightsticks:	591	287	0.04
Food:	828	603	0.05
Gear:	2295	1421	0.14
Other Trip Costs:	426	344	0.03
Total Trip Costs (excluding wages):	9557	7092	0.57
Labor costs	7092	7359	0.43

Table VI.12: Average 1997 Annual Cost and Earnings of Surveyed Vessels Targeting Tuna

Sample size: 21 vessels, *19 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	9.71	4.47	
Number of Crew:	3.71	0.72	
Maximum Mainline Carried (Miles)	32.71	10.09	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	161099	171971	
Variable Expenses	111230	113310	0.80
Trip expenses excluding labor and selling	49452	41678	0.36
Labor costs	60259	90547	0.44
Sales expenses	1519	4387	0.01
Net Operating Returns	49869	60892	
Fixed Costs	26991	18311	0.20
Return to owner	22878	53614	
Earnings from other fishing activity	7092	9562	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	29970	52375	
Depreciation*	13511	8740	
Return to owner after depreciation*	16459	57049	
Estimated Market of Vessel*	158947	102826	
Variable Costs:	111230	113310	0.80
Total Trip Costs (excluding labor):	50971	42227	0.37
Fuel:	10582	9449	0.08
Ice:	4777	3005	0.03
Bait:	10189	11835	0.07
Lightsticks:	2633	5738	0.02
Food:	6778	4969	0.05
Gear:	12522	8912	0.09
Other Trip Costs:	1971	1189	0.01
Selling Fees:	1519	4387	0.01
Labor costs	60259	90547	0.44
Fixed Costs:	26991	18311	0.20
Maintenance:	10562	9472	0.08
Dry-dock:	2549	1792	0.02
Moorage:	986	1340	0.01

Insurance:	7310	5936	0.05
Bookkeeping:	824	1064	0.01
Loan Payments:	3581	8035	0.03
Miscellaneous:	1014	1788	0.01
Depreciation Charge:*	13511	8740	0.10
Fixed Costs :*	42343	25346	0.31
Total Costs (without depreciation)	138221	124505	

*** Values are based on a different sample size than other entries.**

Table VI.12a: Average 1997 Trip Receipts, Costs and Net Operating Revenue for Surveyed Vessels Targeting Tuna

Sample size: 21 vessels, *19 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	11.60	5.39	
Travel days	6.40	3.78	
Average Sets per trip	5.20	2.29	
	Average per vessel	Standard Deviation	Share of Total Variable Cost
Gross Receipts	14765	10807	
Variable Expenses	10433	7192	
Trip expenses excluding labor and selling	4922	3192	0.47
Labor costs	5331	5813	0.51
Sales expenses	180	442	0.02
Net Operating Returns	4332	3973	
Variable Costs:	10433	7192	
Fuel:	1046	716	0.10
Ice:	490	244	0.05
Bait:	966	836	0.09
Lightsticks:	219	405	0.02
Food:	690	411	0.07
Gear:	1309	834	0.13
Other Trip Costs:	202	92	0.02
Total Trip Costs (excluding wages):	5102	3230	0.49
Labor costs	5331	5813	0.51

Table VI.13: Average 1997 Annual Cost and Earnings,

Small Vessels Targeting Swordfish (Pelagic Longlining Vessels, GRT ≤50)

Sample size: 15 vessels, *12 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	23.07	13.76	
Number of Crew:	3.13	0.52	
Maximum Mainline Carried (Miles)	24.40	5.18	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	168178	101472	
Variable Expenses	126500	86990	0.80
Trip expenses excluding labor and selling	71751	44212	0.46
Labor costs	41407	34013	0.26
Sales expenses	13342	21503	0.08
Net Operating Returns	41678	36885	
Fixed Costs	31090	16160	0.20
Return to owner	10587	41166	
Earnings from other fishing activity	3552	6939	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	14139	44802	
Depreciation*	10854	4699	
Return to owner after depreciation*	3285	46479	
Estimated Market of Vessel*	127692	55288	
Variable Costs:	126500	86990	0.80
Total Trip Costs (excluding labor):	85093	56595	0.54
Fuel:	8768	5403	0.06
Ice:	5407	3332	0.03
Bait:	10668	6573	0.07
Lightsticks:	8037	4952	0.05
Food:	7014	4322	0.04
Gear:	29227	18009	0.19
Other Trip Costs:	2630	1621	0.02
Selling Fees:	13342	21503	0.08
Labor costs	41407	34013	0.26
Fixed Costs:	31090	16160	0.20
Maintenance:	10233	7594	0.06

Dry-dock:	4207	9277	0.03
Moorage:	1760	1596	0.01
Insurance:	6567	5612	0.04
Bookkeeping:	1523	2019	0.01
Loan Payments:	5540	8776	0.04
Miscellaneous:	1227	1656	0.01
Depreciation Charge:*	10854	4699	0.07
Fixed Costs :*	42050	20157	0.27
Total Costs (without depreciation)*	157590	88848	

*** Values are based on a different sample size than other entries.**

Table VI.13a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Small Vessels Targeting Swordfish (Pelagic Longlining Vessels, GRT $\leq$50)

Sample size: 15 vessels, *12 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	6.39	2.44	
Travel days	2.70	1.06	
Average Sets per trip	3.69	1.85	
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	7152	3489	
Variable Expenses	5262	2587	
Trip expenses excluding labor and selling	3135	1200	0.60
Labor costs	1643	1141	0.31
Sales expenses	483	805	0.09
Net Operating Returns	1890	1839	
Variable Costs:	5262	2587	
Fuel:	383	147	0.07
Ice:	236	90	0.04
Bait:	466	178	0.09
Lightsticks:	351	134	0.07
Food:	307	117	0.06
Gear:	1277	489	0.24
Other Trip Costs:	115	44	0.02
Total Trip Costs (excluding wages):	3619	1640	0.69
Labor costs	1643	1141	0.31

Table VI.14: Average 1997 Annual Cost and Earnings, Small Vessels

Targeting a Species Mix (Pelagic Longlining Vessels, GRT ≤ 50)

Sample size: 20 vessels, *18 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	13.70	8.47	
Number of Crew:	3.35	0.88	
Maximum Mainline Carried (Miles)	27.40	7.58	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	148065	109919	
Variable Expenses	118588	83231	0.80
Trip expenses excluding labor and selling	60295	36871	0.41
Labor costs	47438	44582	0.32
Sales expenses	10856	15371	0.07
Net Operating Returns	29477	32069	
Fixed Costs	30173	16707	0.20
Return to owner	-696	31947	
Earnings from other fishing activity	2773	5922	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	2077	32393	
Depreciation*	10389	5762	
Return to owner after depreciation*	-11089	36746	
Estimated Market of Vessel*	122222	67785	
Variable Costs:	118588	83231	0.80
Total Trip Costs (excluding labor):	71150	44819	0.48
Fuel:	8565	5238	0.06
Ice:	2930	1792	0.02
Bait:	14989	9166	0.10
Lightsticks:	6086	3722	0.04
Food:	5748	3515	0.04
Gear:	18370	11234	0.12
Other Trip Costs:	3606	2205	0.02
Selling Fees:	10856	15371	0.07
Labor costs	47438	44582	0.32
Fixed Costs:	30173	16707	0.20
Maintenance:	7545	6845	0.05
Dry-dock:	2172	2301	0.01

Moorage:	1838	2628	0.01
Insurance:	9320	5699	0.06
Bookkeeping:	971	1145	0.01
Loan Payments:	6674	10776	0.04
Miscellaneous:	1560	3801	0.01
Depreciation Charge:*	10389	5762	0.07
Fixed Costs :*	41886	19469	0.28
Total Costs (without depreciation included)	148760	90555	

*** Values are based on a different sample size than other entries.**

Table VI.14a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Small Vessels Targeting a Species Mix (Pelagic Longlining Vessels, GRT ≤ 50)

Sample size: 14 vessels, *12 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	8.09	2.93	
Travel days	3.65	1.75	
Average Sets per trip	4.43	2.30	
	Average per vessel	Standard Deviation	Share of Total Variable Costs
Gross Receipts	10800	6387	
Variable Expenses	8540	4410	
Trip expenses excluding labor and selling	4328	1568	0.51
Labor costs	3502	2885	0.41
Sales expenses	711	888	0.08
Net Operating Returns	2260	2314	
Variable Costs:	8540	4410	
Fuel:	615	223	0.07
Ice:	210	76	0.02
Bait:	1076	390	0.13
Lightsticks:	437	158	0.05
Food:	413	149	0.05
Gear:	1319	478	0.15
Other Trip Costs:	259	94	0.03
Total Trip Costs (excluding wages):	5038	1925	0.59
Labor costs	3502	2885	0.41

Table VI.15: Average 1997 Annual Cost and Earnings, Small Vessels

Targeting Tuna (Pelagic Longlining Vessels, GRT ≤50)

Sample size: 9 vessels, *8 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	9.11	4.43
Number of Crew:	3.11	0.33
Maximum Mainline Carried (Miles)	26.00	7.55

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	62019	38738	
Variable Expenses	40956	23839	0.71
Trip expenses excluding labor and selling	17255	13261	0.30
Labor costs	23225	16163	0.40
Sales expenses	476	1080	0.01
Net Operating Returns	21063	17712	
Fixed Costs	16739	11596	0.29
Return to owner	4324	14083	
Earnings from other fishing activity	9221	10545	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	13545	21914	
Depreciation*	8553	3317	
Return to owner after depreciation*	4992	15607	
Estimated Market of Vessel*	100625	39023	
Variable Costs:	40956	23839	0.71
Total Trip Costs (excluding labor):	17731	12953	0.31
Fuel:	3383	2600	0.06
Ice:	2571	1976	0.04
Bait:	2774	2132	0.05
Lightsticks:	0	0	0.00
Food:	2639	2028	0.05
Gear:	4669	3588	0.08
Other Trip Costs:	1218	936	0.02
Selling Fees:	476	1080	0.01
Labor costs	23225	16163	0.40
Fixed Costs:	16739	11596	0.29
Maintenance:	4367	3127	0.08
Dry-dock:	1805	1154	0.03

Moorage:	600	1273	0.01
Insurance:	4456	4435	0.08
Bookkeeping:	956	1420	0.02
Loan Payments:	4089	8153	0.07
Miscellaneous:	400	700	0.01
Depreciation Charge:*	8553	3317	0.15
Fixed Costs :*	26563	13499	0.46
Total Costs (without depreciation)*	57695	30321	

*** Values are based on a different sample size than other entries.**

Table VI.14a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Small Vessels Targeting Tuna (Pelagic Longlining Vessels, GRT ≤50)

Sample size: 9 vessels, *8 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	7.17	4.57	
Travel days	4.02	3.29	
Average Sets per trip	3.14	1.53	
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	6805	3946	
Variable Expenses	4562	2320	
Trip expenses excluding labor and selling	1827	1166	0.40
Labor costs	2645	1973	0.58
Sales expenses	89	189	0.02
Net Operating Returns	2243	2004	
Variable Costs:	4562	2320	
Fuel:	358	229	0.08
Ice:	272	174	0.06
Bait:	294	188	0.06
Lightsticks:	0	0	0.00
Food:	279	178	0.06
Gear:	494	316	0.11
Other Trip Costs:	129	82	0.03
Total Trip Costs (excluding wages):	1917	1151	0.42
Labor costs	2645	1973	0.58

Table VI.16: Average 1997 Annual Cost and Earnings, Medium Vessels Targeting Swordfish (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 11 vessels, *10 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	18.55	13.22
Number of Crew:	3.91	0.83
Maximum Mainline Carried (Miles)	39.55	10.84

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	373620	261138	
Variable Expenses	301183	165861	0.80
Trip expenses excluding labor and selling	161633	39345	0.43
Labor costs	106662	116879	0.28
Sales expenses	32888	28335	0.09
Net Operating Returns	72438	101936	
Fixed Costs	73711	49577	0.20
Return to owner	-1273	69849	
Earnings from other fishing activity	4989	16546	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	3716	72011	
Depreciation*	20953	5994	
Return to owner after depreciation*	-17237	68283	
Estimated Market of Vessel*	246500	70516	
Variable Costs:	301183	165861	0.80
Total Trip Costs (excluding labor):	194521	62497	0.52
Fuel:	31887	7762	0.09
Ice:	3079	749	0.01
Bait:	31007	7548	0.08
Lightsticks:	16493	4015	0.04
Food:	18252	4443	0.05
Gear:	50579	12312	0.13
Other Trip Costs:	10336	2516	0.03
Selling Fees:	32888	28335	0.09
Labor costs	106662	116879	0.28
Fixed Costs:	73711	49577	0.20
Maintenance:	20355	11419	0.05
Dry-dock:	8888	8098	0.02
Moorage:	2484	2423	0.01
Insurance:	19427	12083	0.05

Bookkeeping:	2455	2043	0.01
Loan Payments:	9891	15933	0.03
Miscellaneous:	10023	16042	0.03
Depreciation Charge:*	20953	5994	0.06
Fixed Costs :*	100971	48351	0.27
Total Costs (without depreciation)*	374894	211359	

*** Values are based on a different sample size than other entries.**

Table VI.16a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Medium Vessels Targeting Swordfish (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 11 vessels, *10 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	17.19	10.73	
Travel days	9.33	7.18	
Average Sets per trip	7.86	3.92	
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	35195	35626	
Variable Expenses	26832	24431	
Trip expenses excluding labor and selling	12634	7889	0.47
Labor costs	11158	13890	0.42
Sales expenses	3040	3352	0.11
Net Operating Returns	8363	11341	
Variable Costs:	26832	24431	
Fuel:	2492	1556	0.09
Ice:	241	150	0.01
Bait:	2424	1513	0.09
Lightsticks:	1289	805	0.05
Food:	1427	891	0.05
Gear:	3953	2469	0.15
Other Trip Costs:	808	504	0.03
Total Trip Costs (excluding wages):	15673	11032	0.58
Labor costs	11158	13890	0.42

Table VI.17: Average 1997 Annual Cost and Earnings, Medium Vessels Targeting a Species Mix (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 17 vessels, *17 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	15.76	7.06
Number of Crew:	4.00	0.50
Maximum Mainline Carried (Miles)	35.82	9.08

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	293913	133447	
Variable Expenses	219481	86874	0.79
Trip expenses excluding labor and selling	97335	30006	0.35
Labor costs	101000	61287	0.36
Sales expenses	21146	14595	0.08
Net Operating Returns	74432	54780	
Fixed Costs	58823	24267	0.21
Return to owner	15609	51645	
Earnings from other fishing activity	3714	9485	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	19323	52995	
Depreciation*	17890	7347	
Return to owner after depreciation*	1433	51635	
Estimated Market of Vessel*	210471	86440	
Variable Costs:	219481	86874	0.79
Total Trip Costs (excluding labor):	118481	37329	0.43
Fuel:	20271	6249	0.07
Ice:	2680	826	0.01
Bait:	22449	6921	0.08
Lightsticks:	7706	2376	0.03
Food:	10219	3150	0.04
Gear:	30323	9348	0.11
Other Trip Costs:	3686	1136	0.01
Selling Fees:	21146	14595	0.08
Labor costs	101000	61287	0.36
Fixed Costs:	58823	24267	0.21
Maintenance:	14724	12075	0.05
Dry-dock:	8191	5622	0.03
Moorage:	1547	3121	0.01
Insurance:	15118	7522	0.05

Bookkeeping:	1520	1452	0.01
Loan Payments:	14024	17098	0.05
Miscellaneous:	3632	2413	0.01
Depreciation Charge:*	17890	7347	0.06
Fixed Costs :*	76713	28319	0.28
Total Costs (without depreciation)*	278304	97254	

*** Values are based on a different sample size than other entries.**

Table VI.16a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Medium Vessels Targeting a Species Mix (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 17 vessels, *17 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	11.48	2.66	
Travel days	4.65	1.42	
Average Sets per trip	6.83	2.07	
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	21102	10125	
Variable Expenses	15344	5851	
Trip expenses excluding labor and selling	6670	1546	0.43
Labor costs	7161	4368	0.47
Sales expenses	1512	1012	0.10
Net Operating Returns	5758	4616	
Variable Costs:	15344	5851	
Fuel:	1389	322	0.09
Ice:	184	43	0.01
Bait:	1538	357	0.10
Lightsticks:	528	122	0.03
Food:	700	162	0.05
Gear:	2078	482	0.14
Other Trip Costs:	253	59	0.02
Total Trip Costs (excluding wages):	8182	2085	0.53
Labor costs	7161	4368	0.47

Table VI.18: Average 1997 Annual Cost and Earnings, Medium Vessels Targeting Tuna (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 10 vessels, *10 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	9.40	4.72
Number of Crew:	4.20	0.42
Maximum Mainline Carried (Miles)	38.30	9.72

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	224376	215357	
Variable Expenses	152681	136145	0.81
Trip expenses excluding labor and selling	59807	24694	0.32
Labor costs	90112	124613	0.48
Sales expenses	2762	6198	0.01
Net Operating Returns	71694	80648	
Fixed Costs	35380	18980	0.19
Return to owner	36315	74089	
Earnings from other fishing activity	6595	9400	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	42909	71246	
Depreciation*	16703	10218	
Return to owner after depreciation*	26206	77408	
Estimated Market of Vessel*	196500	120209	
Variable Costs:	152681	136145	0.81
Total Trip Costs (excluding labor):	62569	26139	0.33
Fuel:	12654	5225	0.07
Ice:	5861	2420	0.03
Bait:	10390	4290	0.06
Lightsticks:	1598	660	0.01
Food:	8791	3630	0.05
Gear:	18248	7535	0.10
Other Trip Costs:	2264	935	0.01
Selling Fees:	2762	6198	0.01
Labor costs	90112	124613	0.48
Fixed Costs:	35380	18980	0.19
Maintenance:	14750	10470	0.08
Dry-dock:	3220	2196	0.02
Moorage:	1530	1363	0.01
Insurance:	10340	5977	0.05

Bookkeeping:	720	823	0.00
Loan Payments:	2760	8728	0.01
Miscellaneous:	1770	2329	0.01
Depreciation Charge:*	16703	10218	0.09
Fixed Costs :*	52082	26907	0.28
Total Costs (without depreciation)*	188061	146608	

*** Values are based on a different sample size than other entries.**

Table VI.18a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Medium Vessels Targeting Tuna (Pelagic Longlining Vessels, 50>GRT < 96)

Sample size: 10 vessels, *10 w/ market value of vessel		
	Mean	Standard Deviation
Length of trip:	14.81	3.40
Travel days	8.05	3.36
Average Sets per trip	6.77	1.07

	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	20701	11569	
Variable Expenses	14637	7009	
Trip expenses excluding labor and selling	6652	1528	0.45
Labor costs	7687	7609	0.53
Sales expenses	298	610	0.02
Net Operating Returns	6063	4857	
Variable Costs:	14637	7009	
Fuel:	1407	323	0.10
Ice:	652	150	0.04
Bait:	1156	265	0.08
Lightsticks:	178	41	0.01
Food:	978	225	0.07
Gear:	2030	466	0.14
Other Trip Costs:	252	58	0.02
Total Trip Costs (excluding wages):	6950	1513	0.47
Labor costs	7687	7609	0.53

Table VI.19: Average 1997 Annual Cost and Earnings, Large Vessels

Targeting Swordfish (Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 5 vessels, *5 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	7.00	1.73	
Number of Crew:	5.20	0.45	
Maximum Mainline Carried (Miles)	49.40	9.58	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	537801	199854	
Variable Expenses	403112	113399	0.78
Trip expenses excluding labor and selling	203458	27560	0.40
Labor costs	167831	88765	0.33
Sales expenses	31824	26728	0.06
Net Operating Returns	134689	92711	
Fixed Costs	111189	41841	0.22
Return to owner	23500	64230	
Earnings from other fishing activity	0	0	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	23500	64230	
Depreciation*	48450	14287	
Return to owner after depreciation*	-24950	63406	
Estimated Market of Vessel*	570000	168077	
Variable Costs:	403112	113399	0.78
Total Trip Costs (excluding labor):	235282	40674	0.46
Fuel:	57766	7825	0.11
Ice:	256	35	0.00
Bait:	36806	4986	0.07
Lightsticks:	29650	4016	0.06
Food:	20959	2839	0.04
Gear:	45752	6198	0.09
Other Trip Costs:	12269	1662	0.02
Selling Fees:	31824	26728	0.06
Labor costs	167831	88765	0.33
Fixed Costs:	111189	41841	0.22
Maintenance:	20630	13938	0.04
Dry-dock:	5330	4015	0.01

Moorage:	3722	1848	0.01
Insurance:	34437	8382	0.07
Bookkeeping:	3580	3281	0.01
Loan Payments:	32938	27784	0.06
Miscellaneous:	10551	5058	0.02
Depreciation Charge:*	48450	14287	0.09
Fixed Costs :*	159639	52533	0.31
Total Costs (without depreciation)	514301	140520	

*** Values are based on a different sample size than other entries.**

Table VI.19a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Large Survey Vessels Targeting Swordfish (Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 5 vessels, *5 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	37.37	5.63	
Travel days	23.45	4.01	
Average Sets per trip	13.92	2.31	
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	76619	22917	
Variable Expenses	57741	10959	
Trip expenses excluding labor and selling	29747	4480	0.52
Labor costs	23546	10954	0.41
Sales expenses	4449	3768	0.08
Net Operating Returns	18877	12613	
Variable Costs:	57741	10959	
Fuel:	8446	1272	0.15
Ice:	37	6	0.00
Bait:	5381	810	0.09
Lightsticks:	4335	653	0.08
Food:	3064	462	0.05
Gear:	6689	1007	0.12
Other Trip Costs:	1794	270	0.03
Total Trip Costs (excluding wages):	34196	4984	0.59
Labor costs	23546	10954	0.41

Table VI.20: Average 1997 Annual Cost and Earnings, Large Vessels

Targeting a Species Mix (Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 13 vessels, *10 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	10.62	4.81
Number of Crew:	4.69	0.63
Maximum Mainline Carried (Miles)	40.62	13.04

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	346938	162402	
Variable Expenses	277462	120978	0.79
Trip expenses excluding labor and selling	153588	43583	0.44
Labor costs	106689	72833	0.30
Sales expenses	17184	29800	0.05
Net Operating Returns	69477	59584	
Fixed Costs	74784	42408	0.21
Return to owner	-5307	74776	
Earnings from other fishing activity	7818	16815	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	2511	83006	
Depreciation*	24395	13296	
Return to owner after depreciation*	-21884	74217	
Estimated Market of Vessel*	287000	156422	
Variable Costs:	277462	120978	0.79
Total Trip Costs (excluding labor):	170773	61071	0.48
Fuel:	56316	15980	0.16
Ice:	4551	1291	0.01
Bait:	21995	6242	0.06
Lightsticks:	8533	2421	0.02
Food:	15359	4358	0.04
Gear:	38302	10869	0.11
Other Trip Costs:	8533	2421	0.02
Selling Fees:	17184	29800	0.05
Labor costs	106689	72833	0.30
Fixed Costs:	74784	42408	0.21
Maintenance:	24940	18313	0.07
Dry-dock:	7060	6982	0.02

Moorage:	536	1414	0.00
Insurance:	20904	14254	0.06
Bookkeeping:	1792	2786	0.01
Loan Payments:	13792	19182	0.04
Miscellaneous:	5719	8958	0.02
Depreciation Charge:*	24395	13296	0.07
Fixed Costs :*	102507	41987	0.29
Total Costs (without depreciation)	352246	136783	

*** Values are based on a different sample size than other entries.**

Table VI.20a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Large Vessels Targeting a Species Mix (Pelagic Longlining Vessels, GRT ≥ 96)

Sample size: 14 vessels, *11 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	20.20	7.78	
Travel days	10.60	5.96	
Average Sets per trip	9.59	3.17	
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	39905	27818	
Variable Expenses	30831	18897	
Trip expenses excluding labor and selling	16360	6300	0.53
Labor costs	12525	11361	0.41
Sales expenses	1946	3721	0.06
Net Operating Returns	9074	10149	
Variable Costs:	30831	18897	
Fuel:	5999	2310	0.19
Ice:	485	187	0.02
Bait:	2343	902	0.08
Lightsticks:	909	350	0.03
Food:	1636	630	0.05
Gear:	4080	1571	0.13
Other Trip Costs:	909	350	0.03
Total Trip Costs (excluding wages):	18307	8606	0.59
Labor costs	12525	11361	0.41

Table VI.21: Average 1997 Annual Cost and Earnings,

Full Time Pelagic Longlining Vessels

Sample size: 87 vessels, *78 w/ market value of vessel			
	Mean	Standard Deviation	
Total Number of Trips:	15.95	9.60	
Number of Crew:	3.92	0.88	
Maximum Mainline Carried (Miles)	34.52	11.00	
Summary of Cost and Earnings			
	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	276604	186381	
Variable Expenses	211907	132366	0.80
Trip expenses excluding labor and selling	107679	55673	0.41
Labor costs	87181	80890	0.33
Sales expenses	17047	22366	0.06
Net Operating Returns	64697	65332	
Fixed Costs	52243	38203	0.20
Return to owner	12454	56333	
Earnings from other fishing activity	3245	8691	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	15699	58207	
Depreciation*	18044	12569	
Return to owner after depreciation*	-7239	59304	
Estimated Market of Vessel*	212282	147865	
Variable Costs:	211907	132366	0.80
Total Trip Costs (excluding labor):	124726	68992	0.47
Fuel:	24920	19616	0.09
Ice:	4085	2391	0.02
Bait:	20543	10544	0.08
Lightsticks:	9654	7196	0.04
Food:	11420	5801	0.04
Gear:	31560	15051	0.12
Other Trip Costs:	5495	3615	0.02
Selling Fees:	17047	22366	0.06
Labor costs	87181	80890	0.33
Fixed Costs:	52243	38203	0.20
Maintenance:	15147	12595	0.06
Dry-dock:	5468	6541	0.02

Moorage:	1592	2318	0.01
Insurance:	13970	11488	0.05
Bookkeeping:	1545	1917	0.01
Loan Payments:	10423	16248	0.04
Miscellaneous:	4017	7648	0.02
Depreciation Charge:*	18044	12569	0.07
Fixed Costs :*	72316	46636	0.27
Total Costs (without depreciation)	264150	160795	

*** Values are based on a different sample size than other entries.**

Table VI.21a: Average 1997 Trip Receipts, Costs and Net Operating Revenue, Full Time Pelagic Longlining Vessels

Sample size: 87 vessels, *78 w/ market value of vessel			
	Mean	Standard Deviation	
Length of trip:	13.87	9.04	
Travel days	7.09	6.15	
Average Sets per trip	6.79	3.47	
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	24286	24841	
Variable Expenses	18240	17677	
Trip expenses excluding labor and selling	9048	7804	0.50
Labor costs	7781	9253	0.43
Sales expenses	1411	2382	0.08
Net Operating Returns	6046	7822	
Variable Costs:	18240	17677	
Fuel:	2298	2609	0.13
Ice:	303	202	0.02
Bait:	1682	1337	0.09
Lightsticks:	810	1002	0.04
Food:	966	807	0.05
Gear:	2512	1854	0.14
Other Trip Costs:	478	486	0.03
Total Trip Costs (excluding wages):	10459	9403	0.57
Labor costs	7781	9253	0.43

Table VI.22: Average 1997 Annual Cost and Earnings,

Part Time Pelagic Longlining Vessels

Sample size: 15vessels, *14 w/ market value of vessel		
	Mean	Standard Deviation
Total Number of Trips:	5.40	3.50
Number of Crew:	3.27	0.59
Maximum Mainline Carried (Miles)	27.80	11.42

Summary of Cost and Earnings

	Average per vessel	Standard Deviation	Share of Total Cost
Gross Receipts	73870	86752	
Variable Expenses	55730	69870	0.66
Trip expenses excluding labor and selling	26613	38817	0.32
Labor costs	24462	28316	0.29
Sales expenses	4656	9054	0.06
Net Operating Returns	18140	21550	
Fixed Costs	28696	17002	0.34
Return to owner	-10555	23242	
Earnings from other fishing activity	13001	15800	
All vessel owner earnings (Return to owner + Earnings from other fishing activity	2445	35116	
Depreciation*	12659	5934	
Return to owner after depreciation*	-23520	25358	
Estimated Market of Vessel*	148929	69812	
Variable Costs:	55730	69870	0.66
Total Trip Costs (excluding labor):	31269	45644	0.37
Fuel:	4885	7694	0.06
Ice:	1632	1596	0.02
Bait:	5279	7543	0.06
Lightsticks:	1952	4065	0.02
Food:	3193	4462	0.04
Gear:	8106	12117	0.10
Other Trip Costs:	1566	2473	0.02
Selling Fees:	4656	9054	0.06
Labor costs	24462	28316	0.29
Fixed Costs:	28696	17002	0.34
Maintenance:	7333	8575	0.09
Dry-dock:	2653	2532	0.03

Moorage:	1637	1859	0.02
Insurance:	9173	5395	0.11
Bookkeeping:	1280	1838	0.02
Loan Payments:	5080	7030	0.06
Miscellaneous:	1367	1899	0.02
Depreciation Charge:*	12659	5934	0.15
Fixed Costs :*	42968	20684	0.51
Total Costs (without depreciation)	84426	80882	

*** Values are based on a different sample size than other entries.**

Table VI.22a: Average 1997 Trip Receipts, Costs and Net Operating Revenue,

Part Time Pelagic Longlining Vessels

Sample size: 15 vessels, *14 w/ market value of vessel			
	Mean		Standard Deviation
Length of trip:	8.53		6.59
Travel days	4.56		4.13
Average Sets per trip	3.98		3.14
	Average per vessel	Standard Deviation	Share of Total Trip Cost
Gross Receipts	11214	10883	
Variable Expenses	8497	8407	
Trip expenses excluding labor and selling	4238	4676	0.50
Labor costs	3646	3967	0.43
Sales expenses	612	1062	0.07
Net Operating Returns	2717	3241	
Variable Costs:	8497	8407	
Fuel:	756	960	0.09
Ice:	265	206	0.03
Bait:	844	896	0.10
Lightsticks:	320	487	0.04
Food:	501	558	0.06
Gear:	1316	1460	0.15
Other Trip Costs:	237	291	0.03
Total Trip Costs (excluding wages):	4851	5434	0.57
Labor costs	3646	3967	0.43

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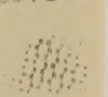

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